U.S. DEPARTMENT OF COMMERCE
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PB-253 737

THE TRANSPORT OF OXIDANT BEYOND URBAN AREAS

APPENDICES A-D

BATTELLE COLUMBUS LABORATORIES

PREPARED FOR
ENVIRONMENTAL SCIENCES RESEARCH LABORATORY

FEBRUARY 1976

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February 1976

PB 253 737

Ecological Research Series

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16. ABSTRACT

The 1974 investigation of oxidants in the mid-western United States involved several research groups situated in various points in the Ohio Valley. The Battelle Laboratory group was positioned in Dayton Ohio.

The data collection was carried out over a 20-day period between July 17 and August 12, 1974. Interpretations of the results are discussed in terms of statistical, graphical, chemical, and meteorological analyses of the data. The data suggest that no single source of ozone, be it urban transport, natural, emissions, stratospheric, etc. can account for the ozone patterns observed in this and other studies.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
*Air Pollution		13B
*Field tests		14B
Measurement	Ohio Valley	14G
*Ozone	Dayton, Ohio	07B
Transport properties		12A
*Analysis (Mathematics)		

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February 1976

THE TRANSPORT OF OXIDANT BEYOND URBAN AREAS

APPENDICES A-D

by

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OFFICE OF RESEARCH AND DEVELOPMENT
ENVIRONMENTAL SCIENCES RESEARCH LABORATORY
RESEARCH TRIANGLE PARK, NORTH CAROLINA 27711

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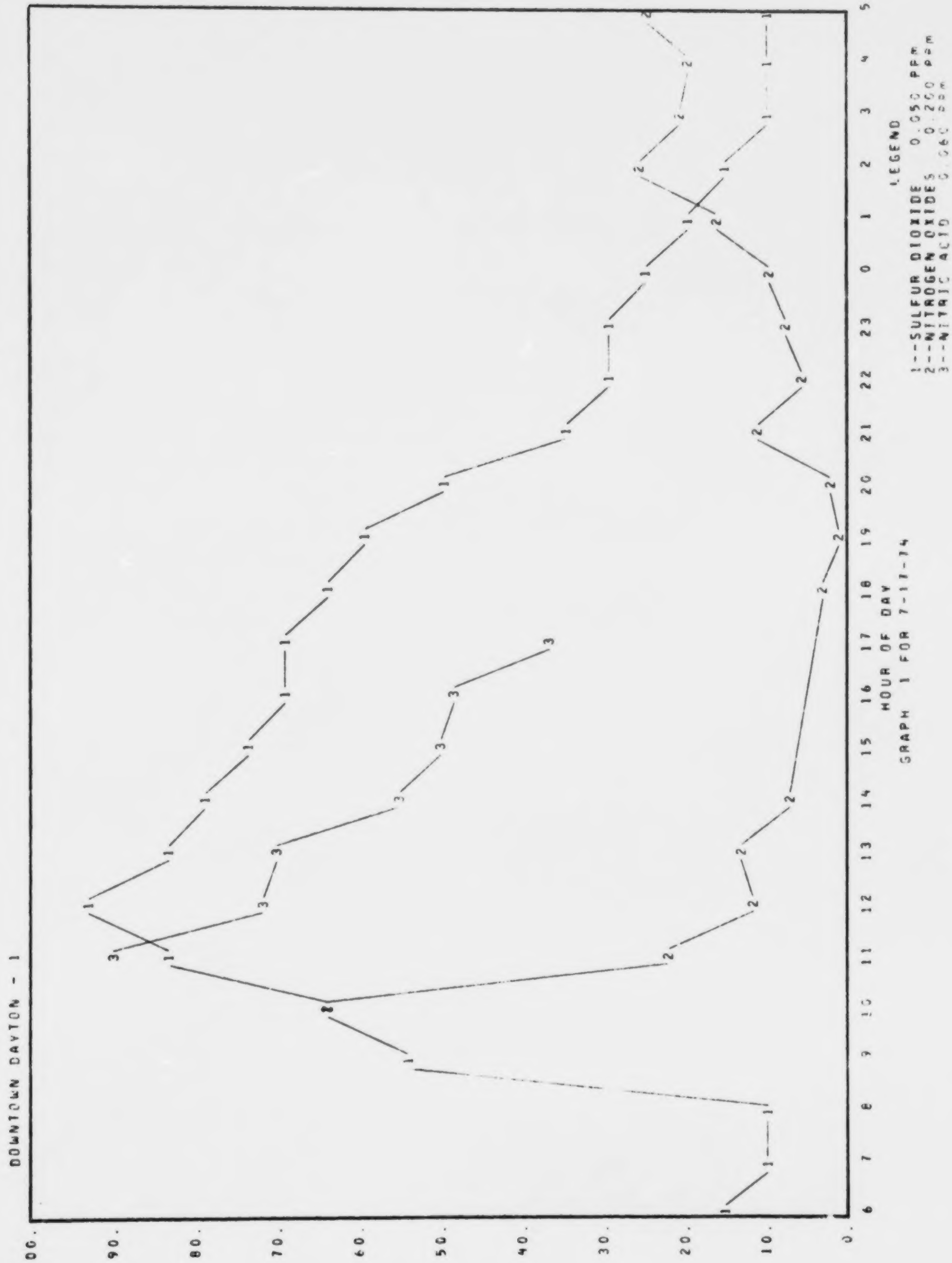
APPENDIX A

DOWNTOWN DAYTON (SITE 1) RESULTS

A-1



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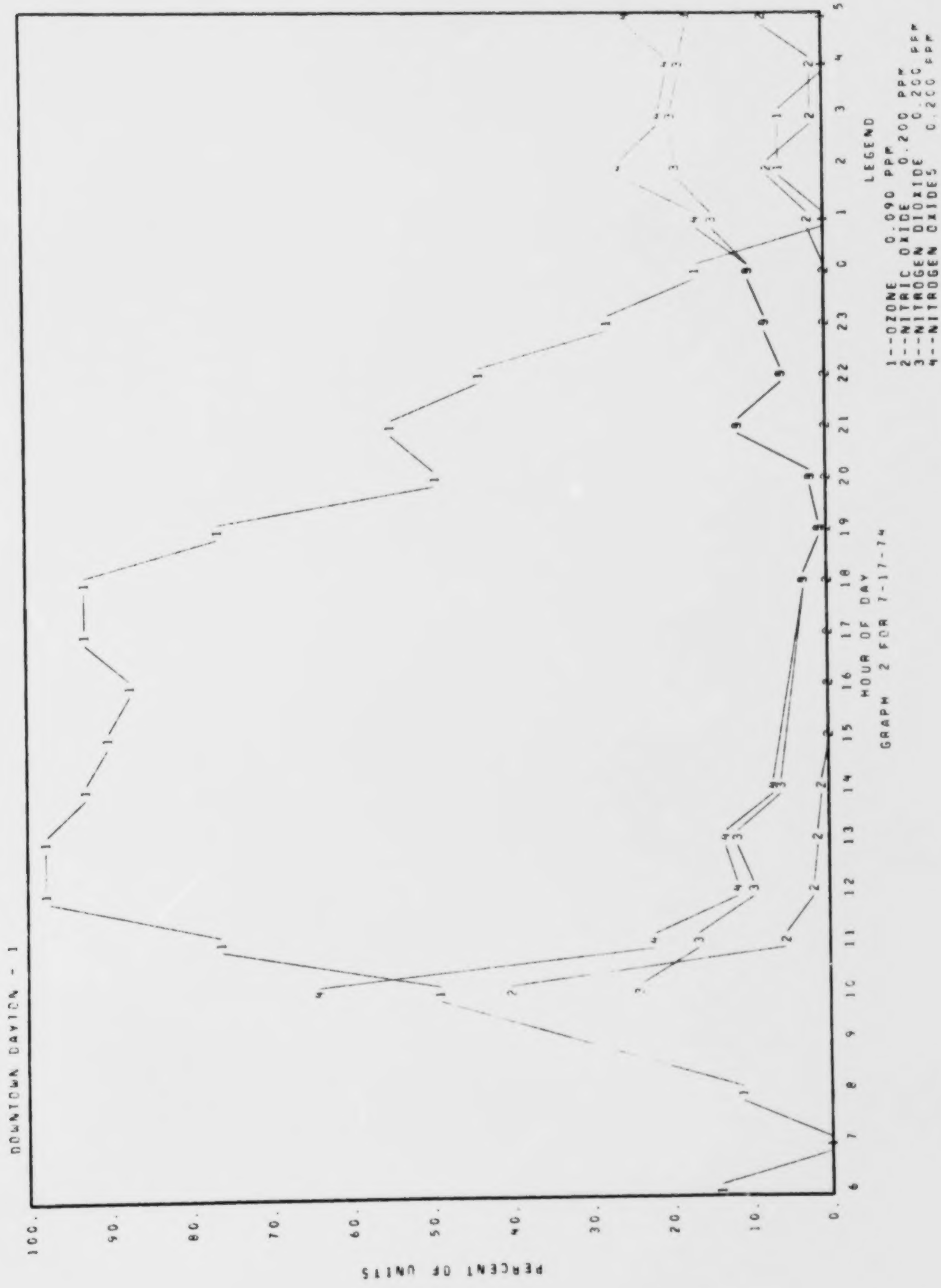
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HOUR OF DAY
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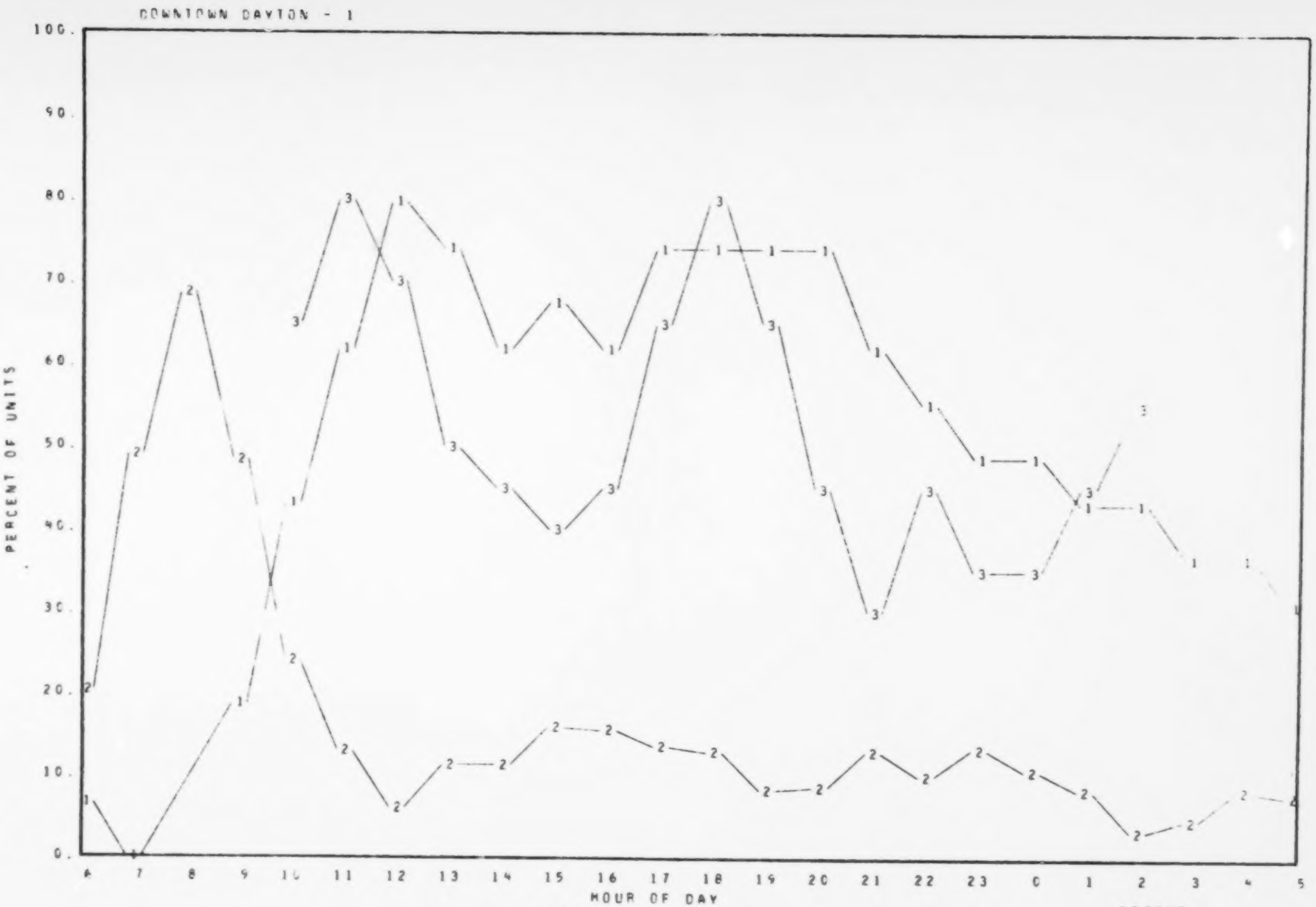
3--NITROGEN DIOXIDE 0.200 PPM
4--NITROGEN OXIDES 0.200 PPM



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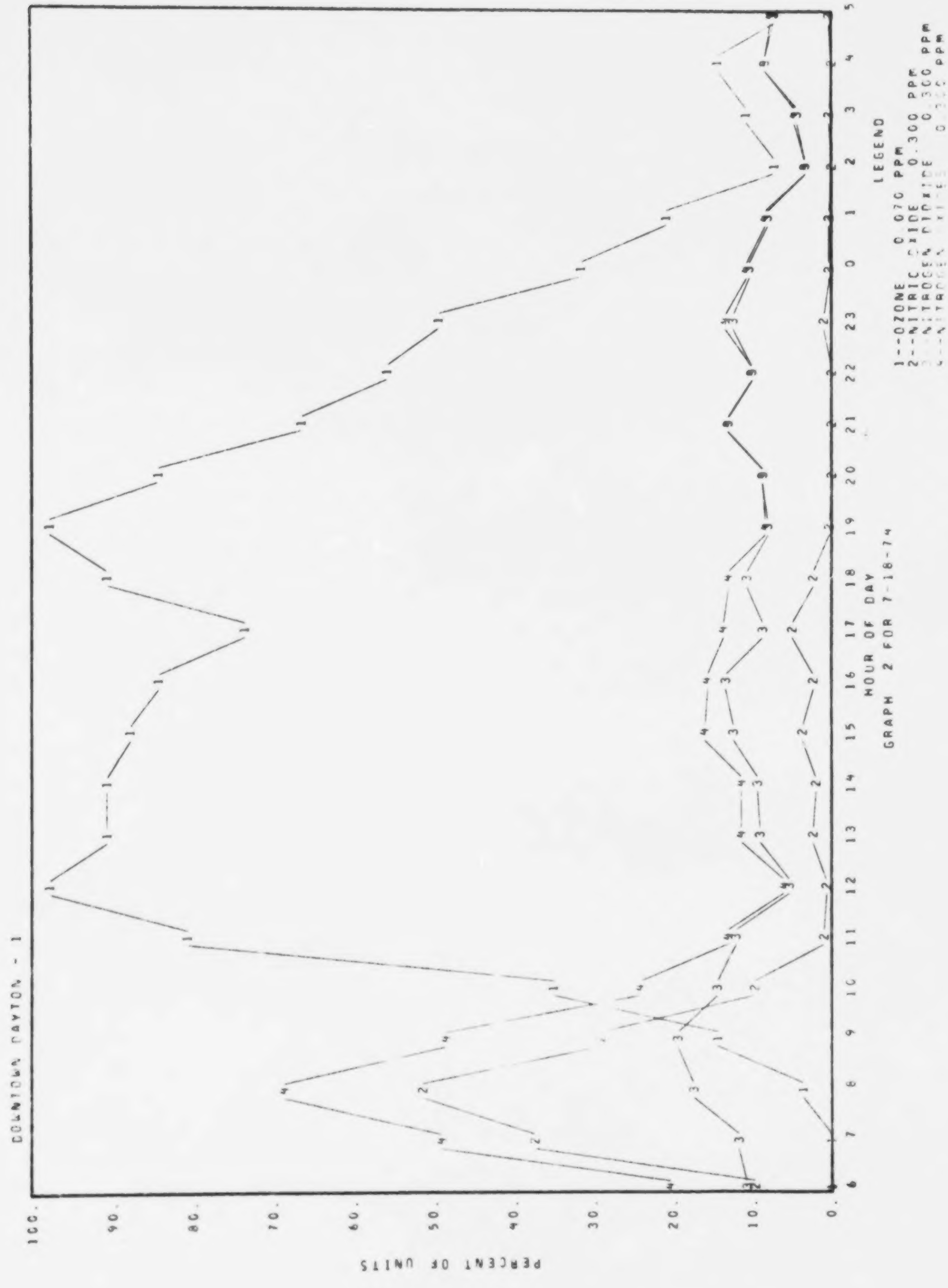

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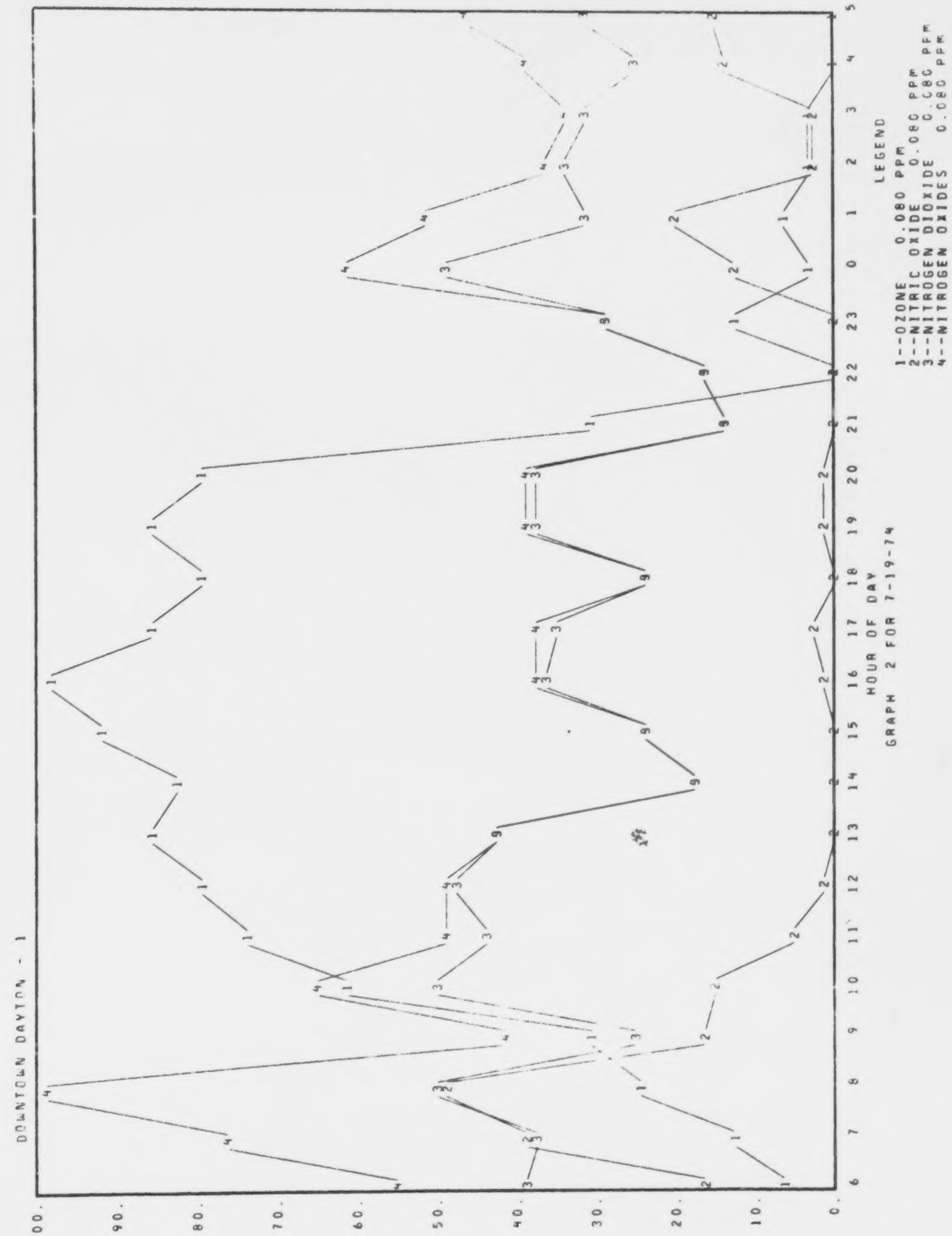
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90.
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70.
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50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR 7-19-74
LEGEND
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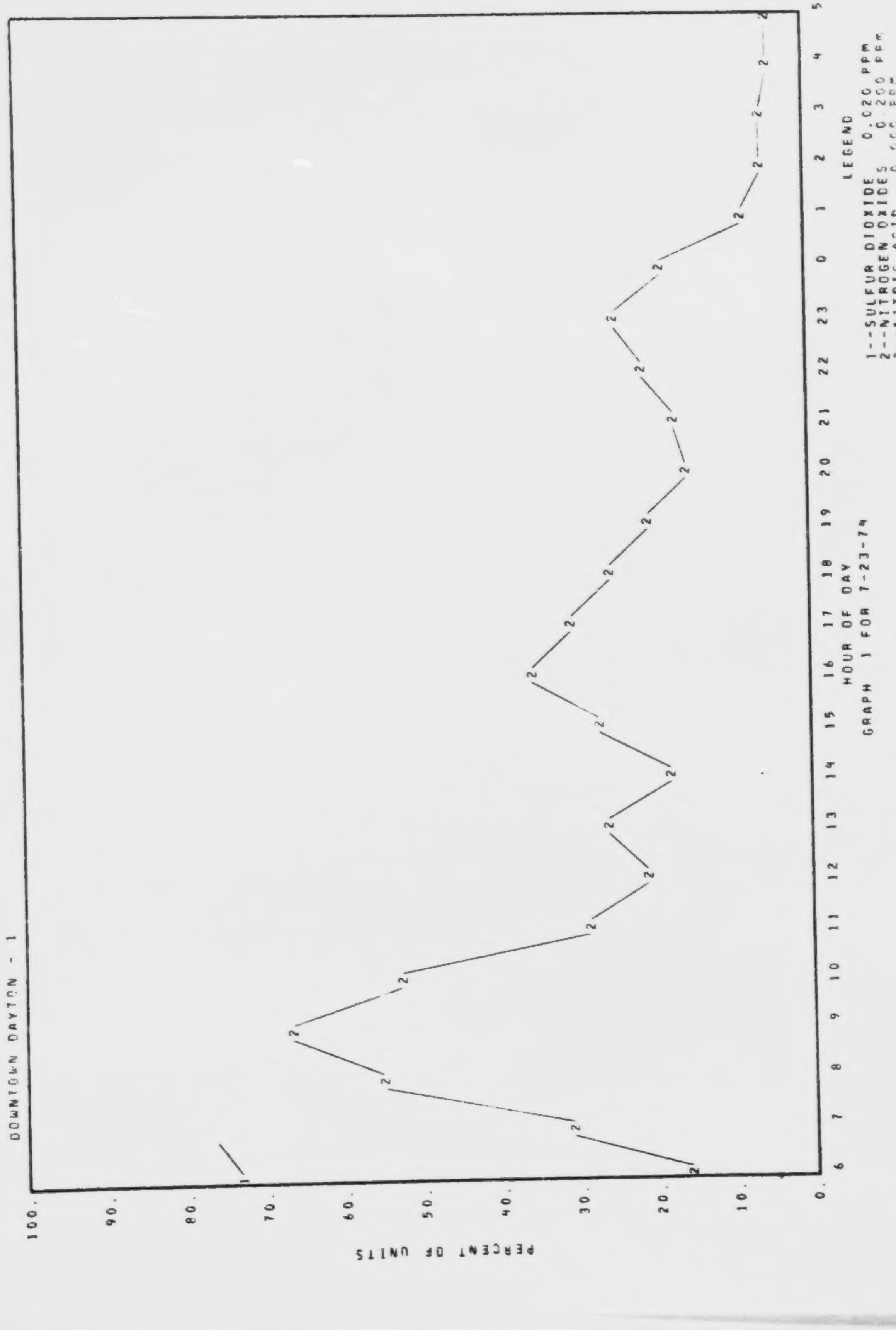
3--NITROGEN DIOXIDE 0.080 PPM
4--NITROGEN OXIDES 0.080 PPM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HOUR OF DAY
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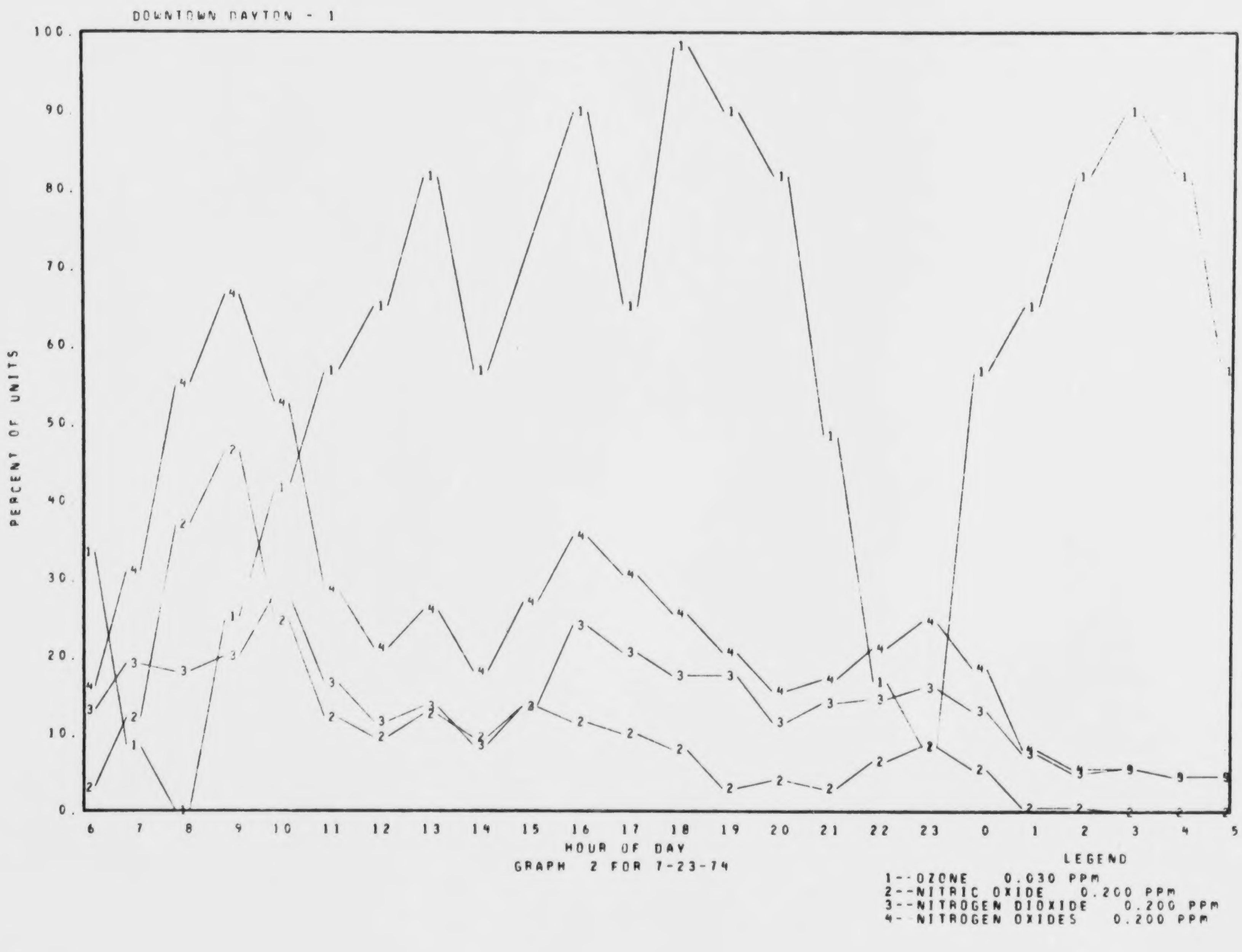
2--NITROGEN OXIDES 0.200 PPM
3--NITRIC ACID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90.
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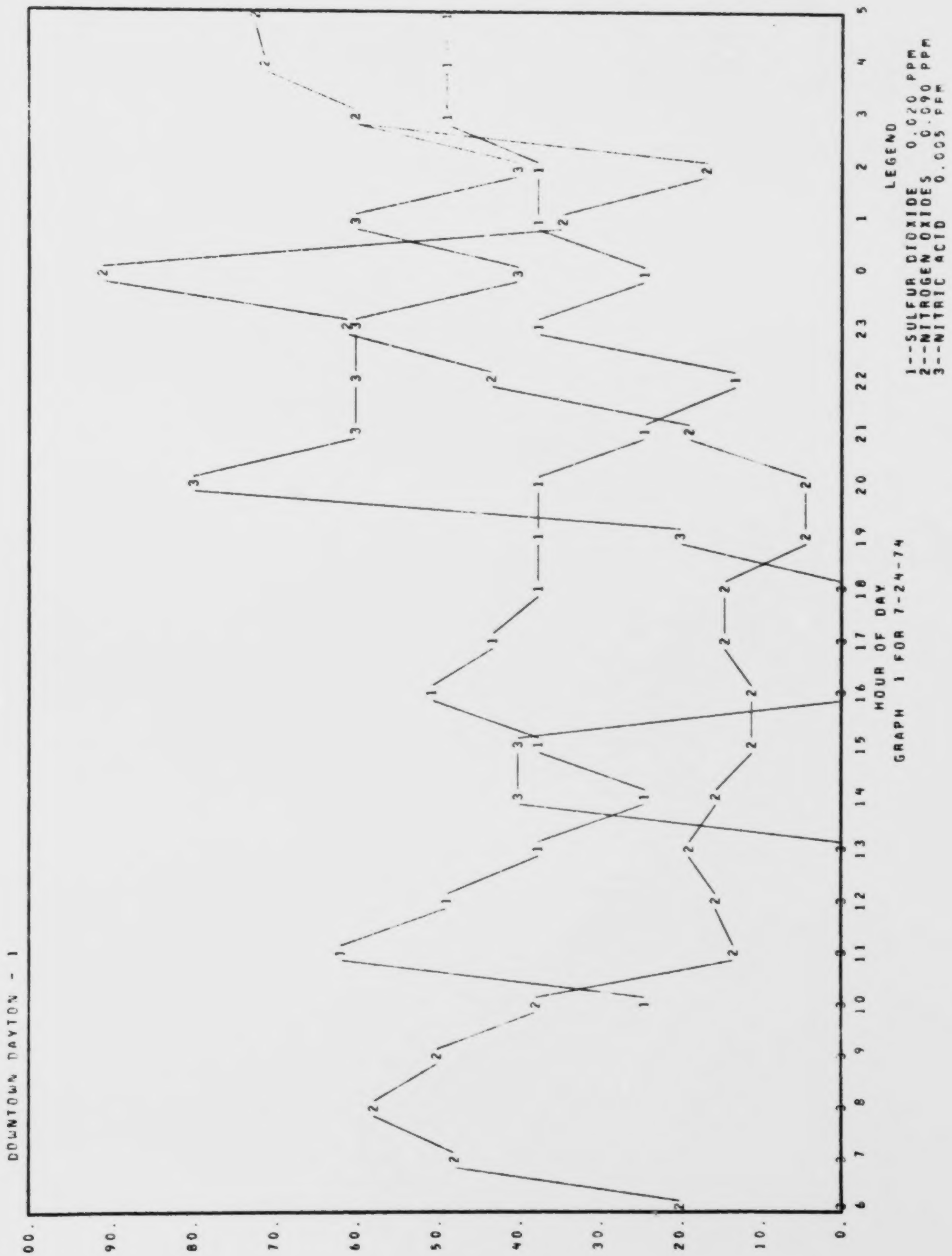
70.
60.
50.
40
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR 7-23-74
LEGEND
1--OZONE 0.030 PPM
2--NITRIC OXIDE 0.200 PPM
3--NITROGEN DIOXIDE 0.200 PPM
4--NITROGEN OXIDES 0.200 PPM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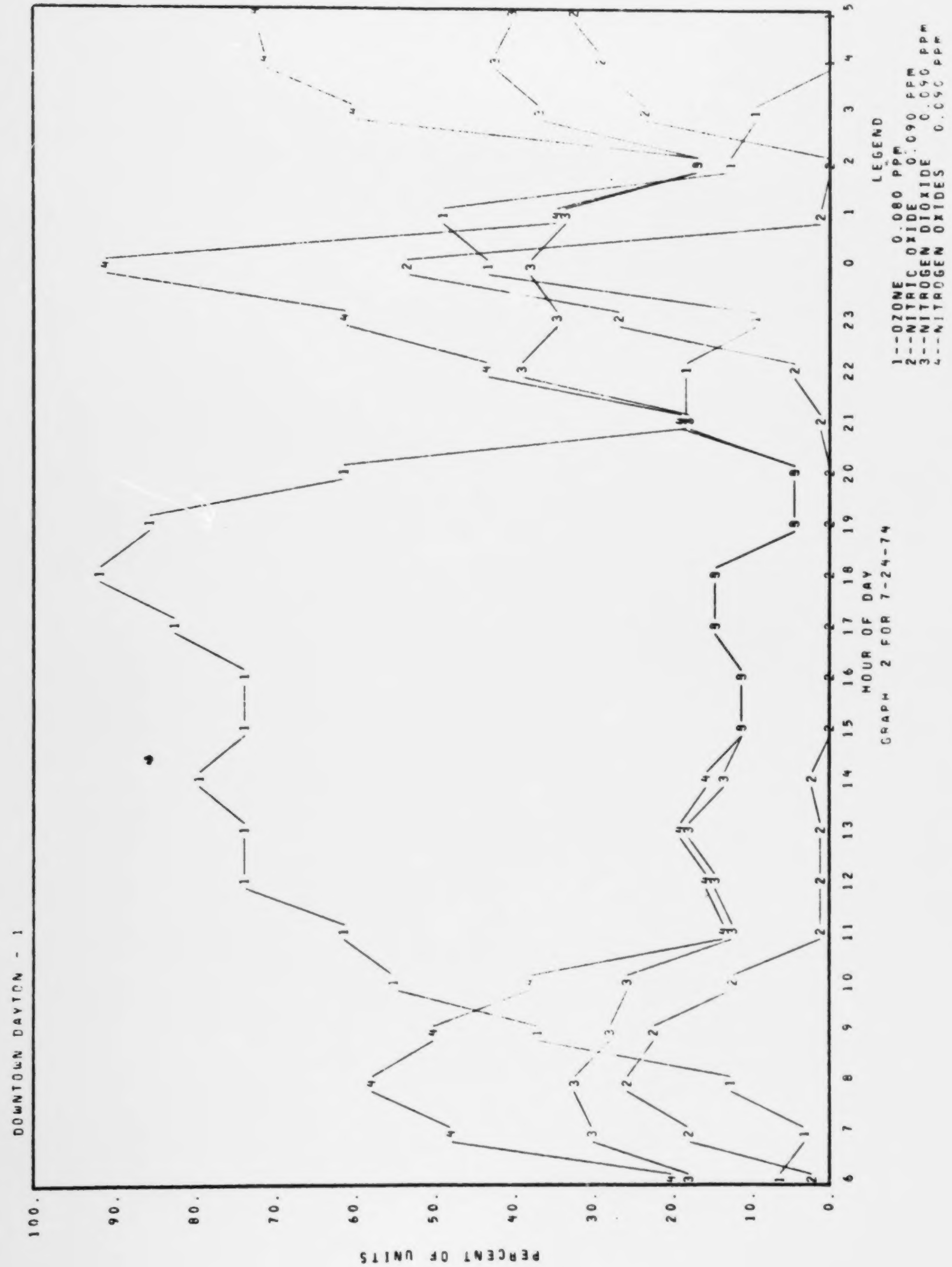
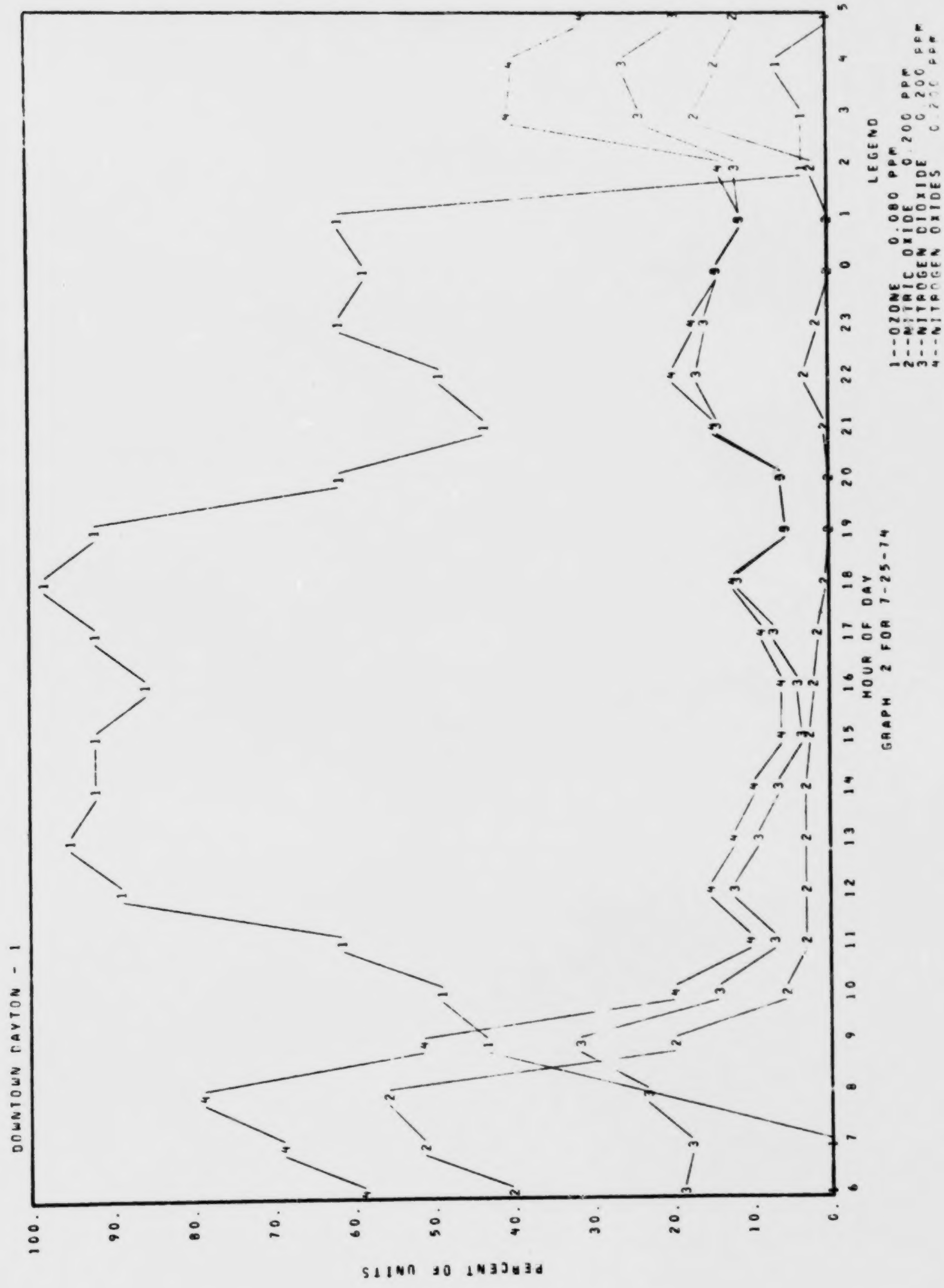


GRAPH 2 FOR 7-24-74

GRAPH 1 FOR 7-25-74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90.
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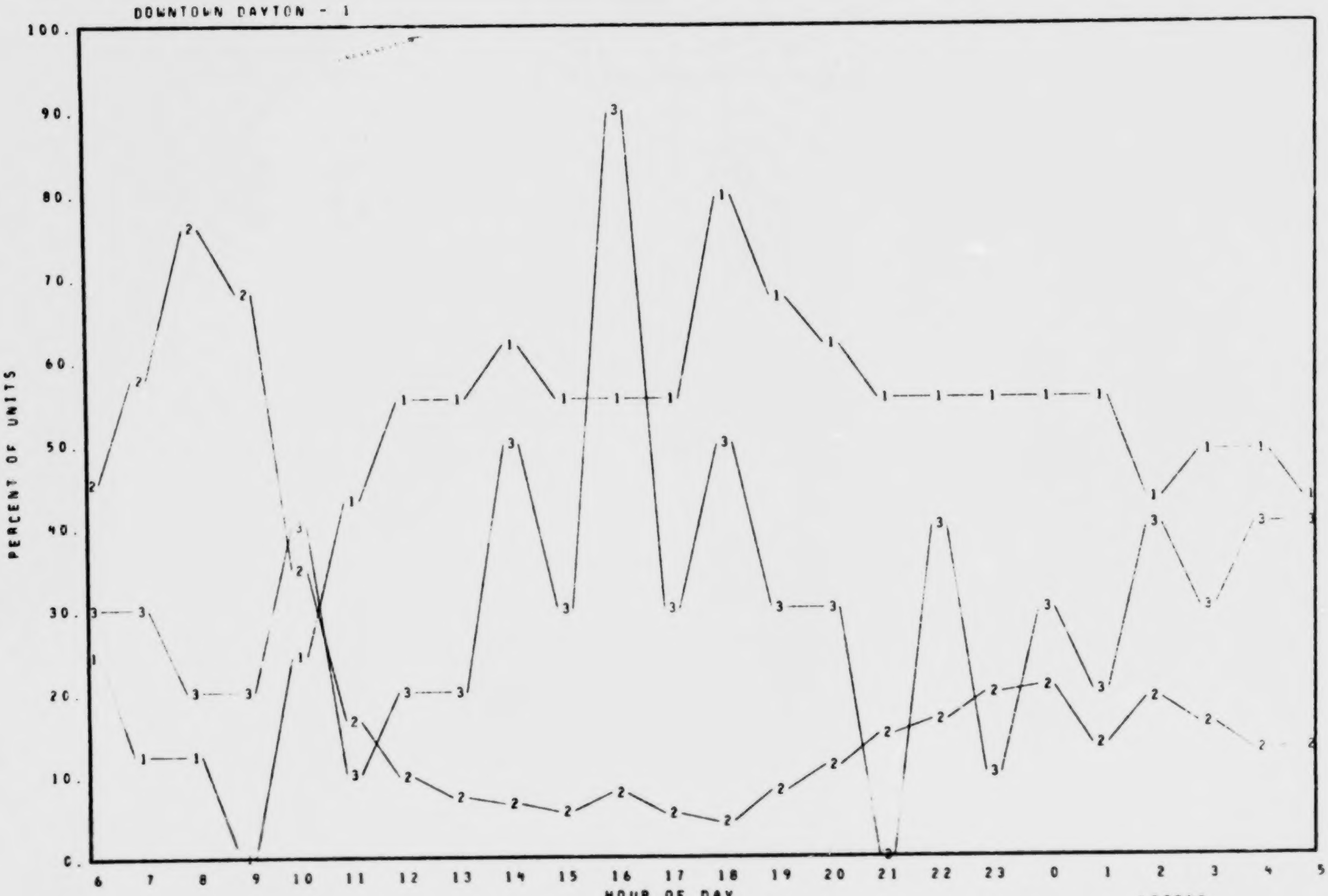
HOUR OF DAY
GRAPH 2 FOR 7-25-74
LEGEND
1--OZONE 0.080 PPM
2--NITRIC OXIDE 0.200 PPM
3--NITROGEN DIOXIDE 0.200 PPM
4--NITROGEN OXIDES 0.200 PPM



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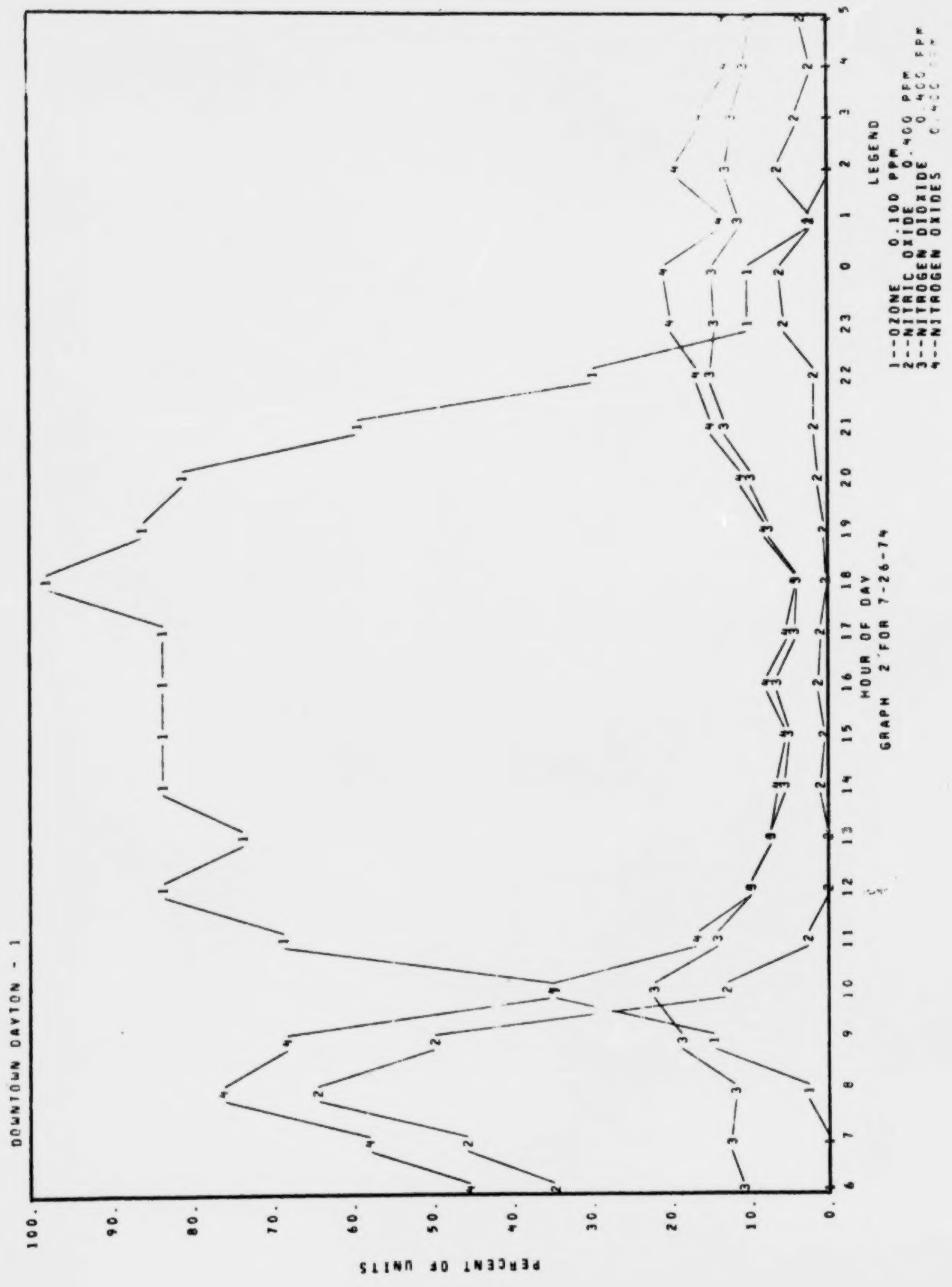
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PERCENT OF UNITS
0. 10. 20. 30. 40. 50. 60. 70. 80. 90. 100.
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HOUR OF DAY
GRAPH 2 FOR 7-26-74
LEGEND
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2--NITRIC OXIDE 0.400 PPM
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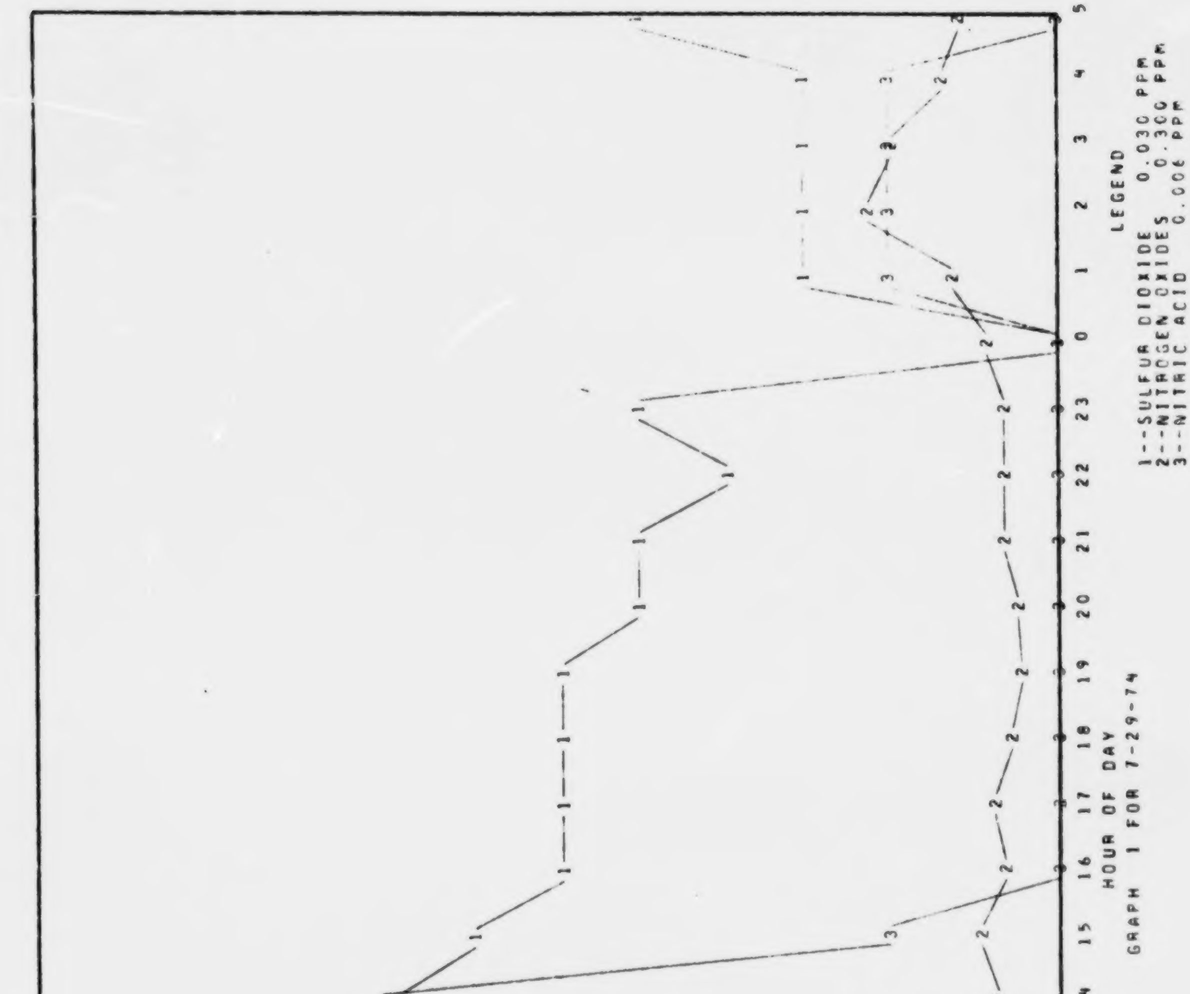
4--NITROGEN OXIDES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HOUR OF DAY
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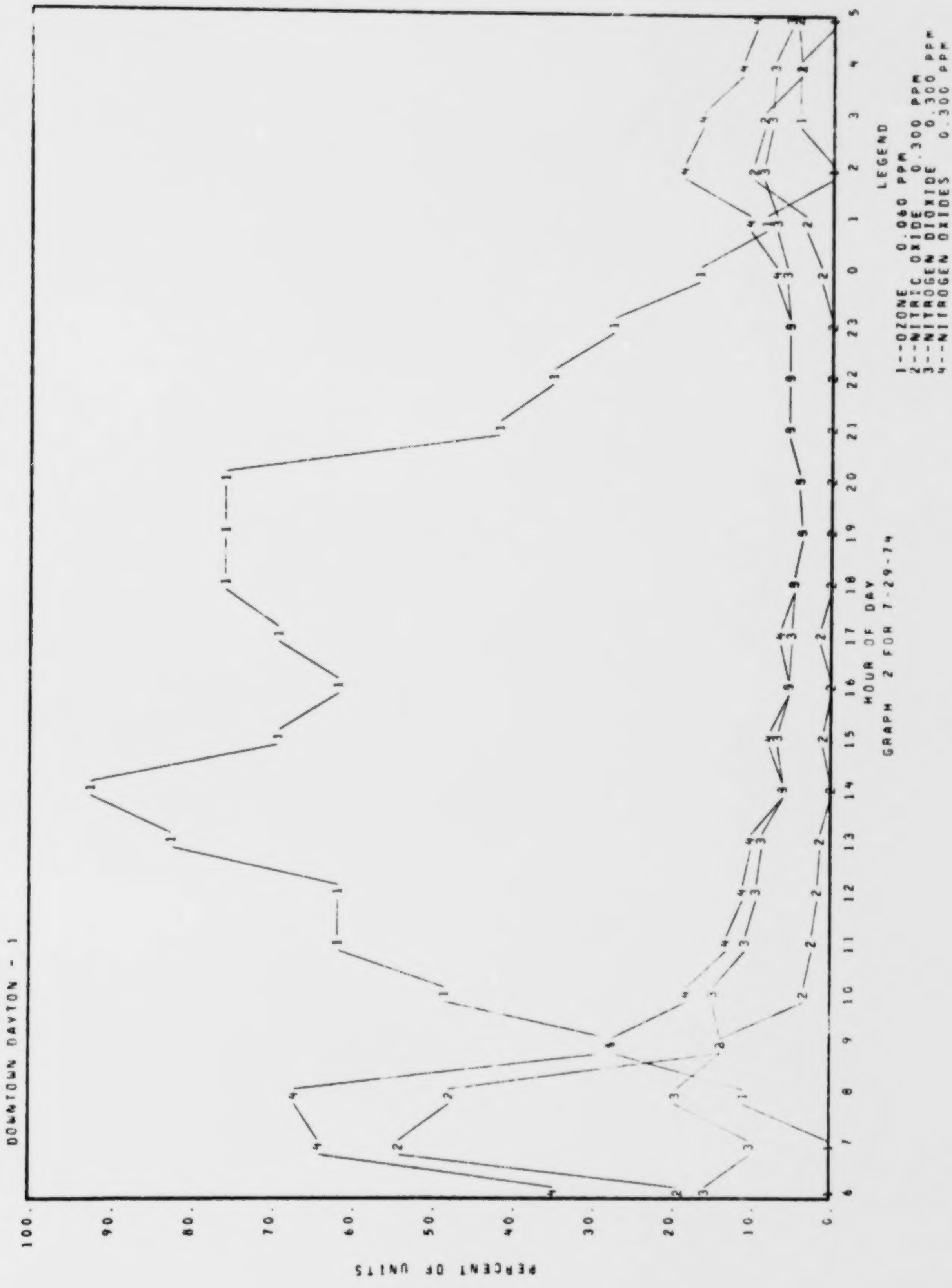

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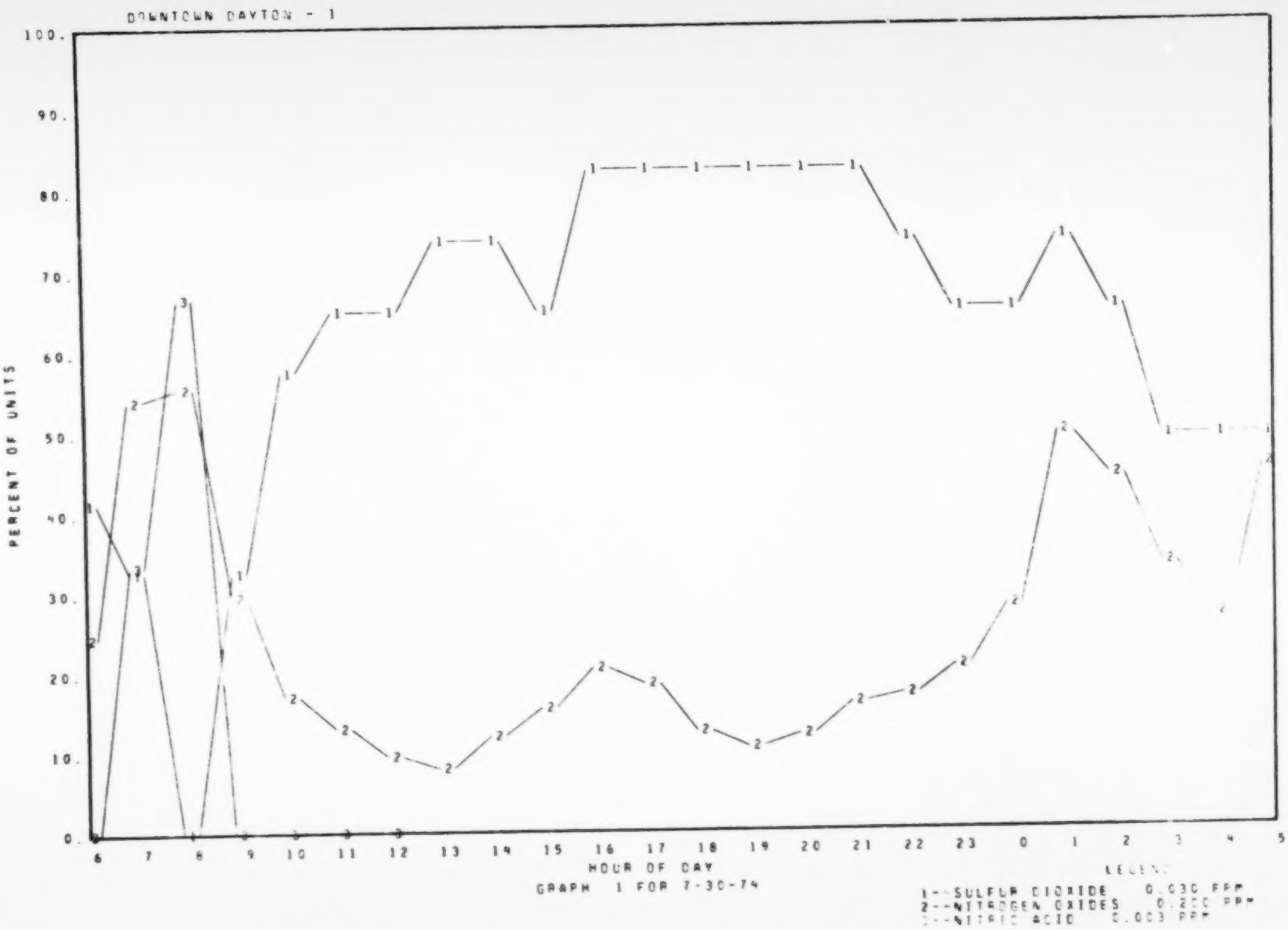

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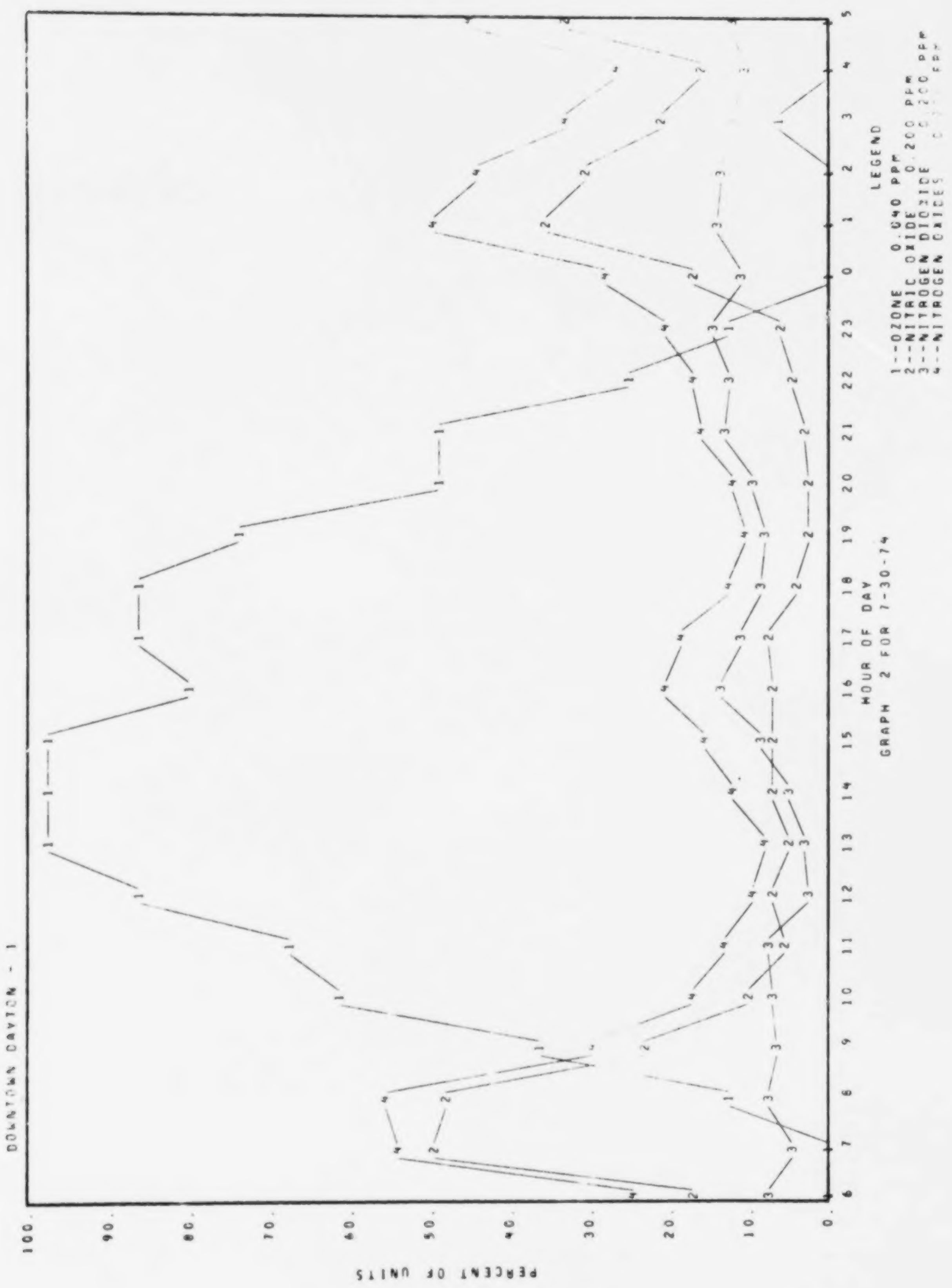

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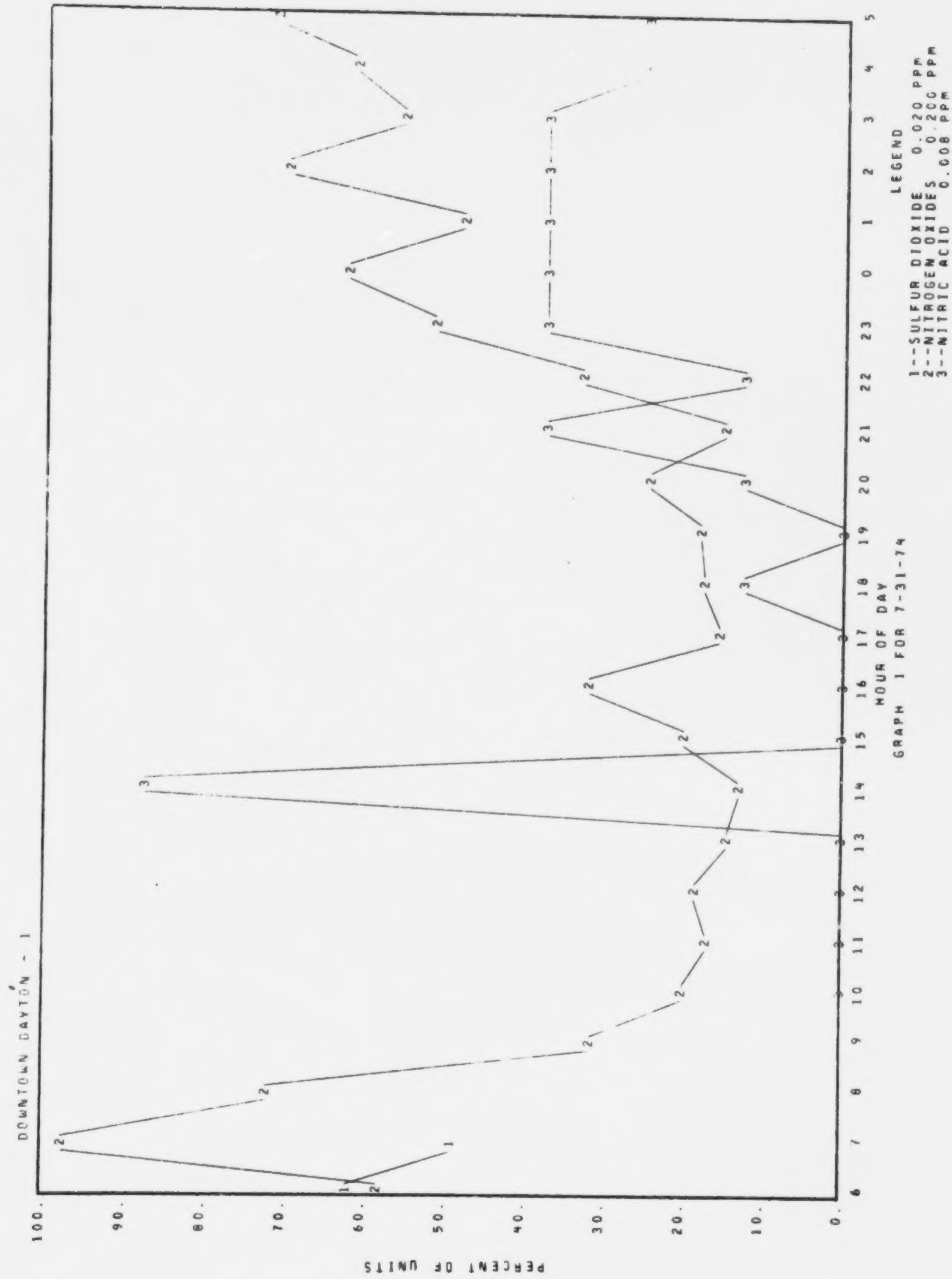
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PERCENT OF UNITS
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90.
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70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 1 FOR 7-31-74
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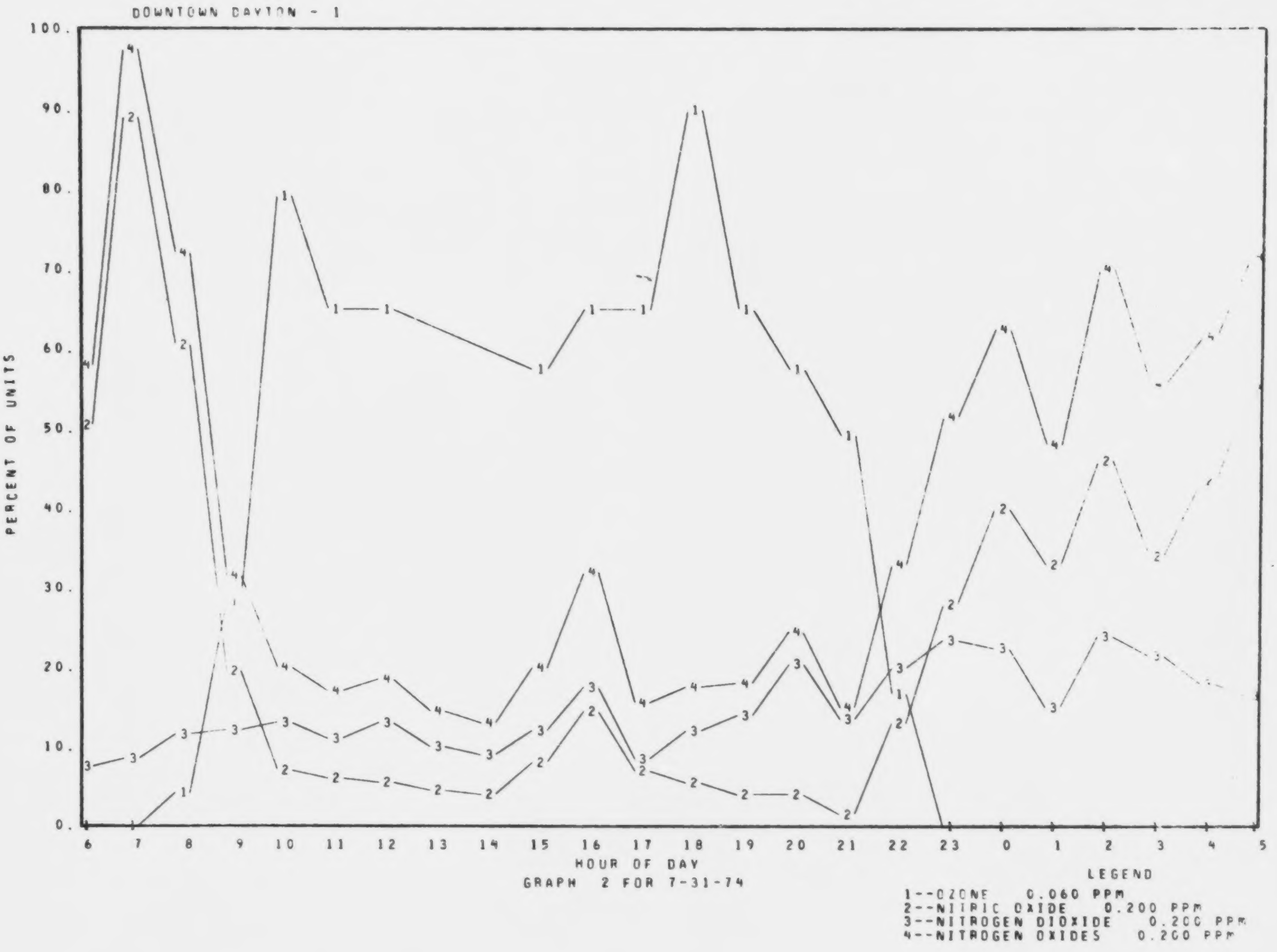
3--NITRIC ACID 0.008 PPM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HOUR OF DAY
GRAPH 2 FOR 7-31-74
LEGEND
1--OZONE 0.060 PPM
2--NITRIC OXIDE 0.200 PPM
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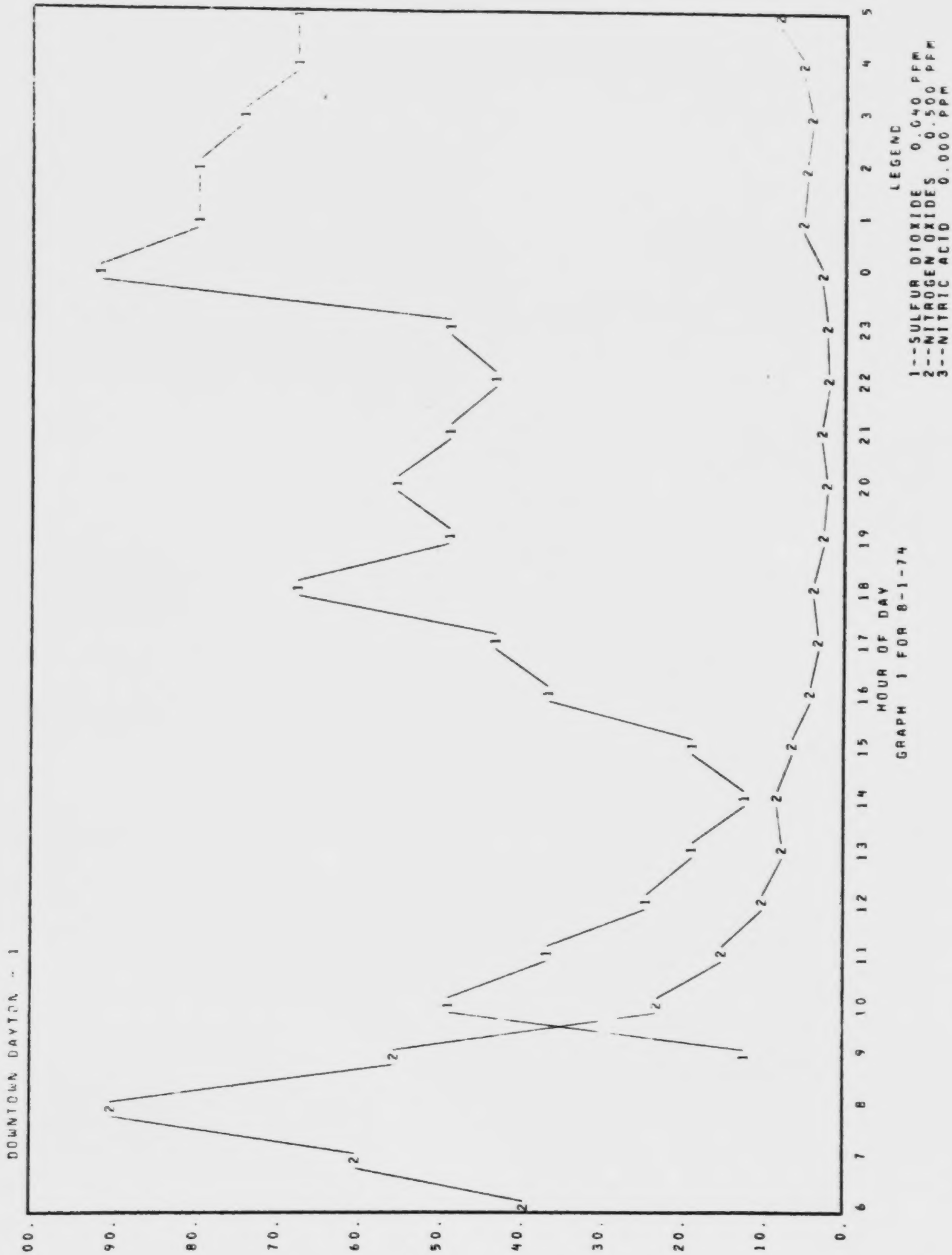
4--NITROGEN OXIDES 0.200 PPM


DOWNTOWN DAYTON - 1
PERCENT OF UNITS
HOUR OF DAY
GRAPH 1 FOR 8-1-74
LEGEND
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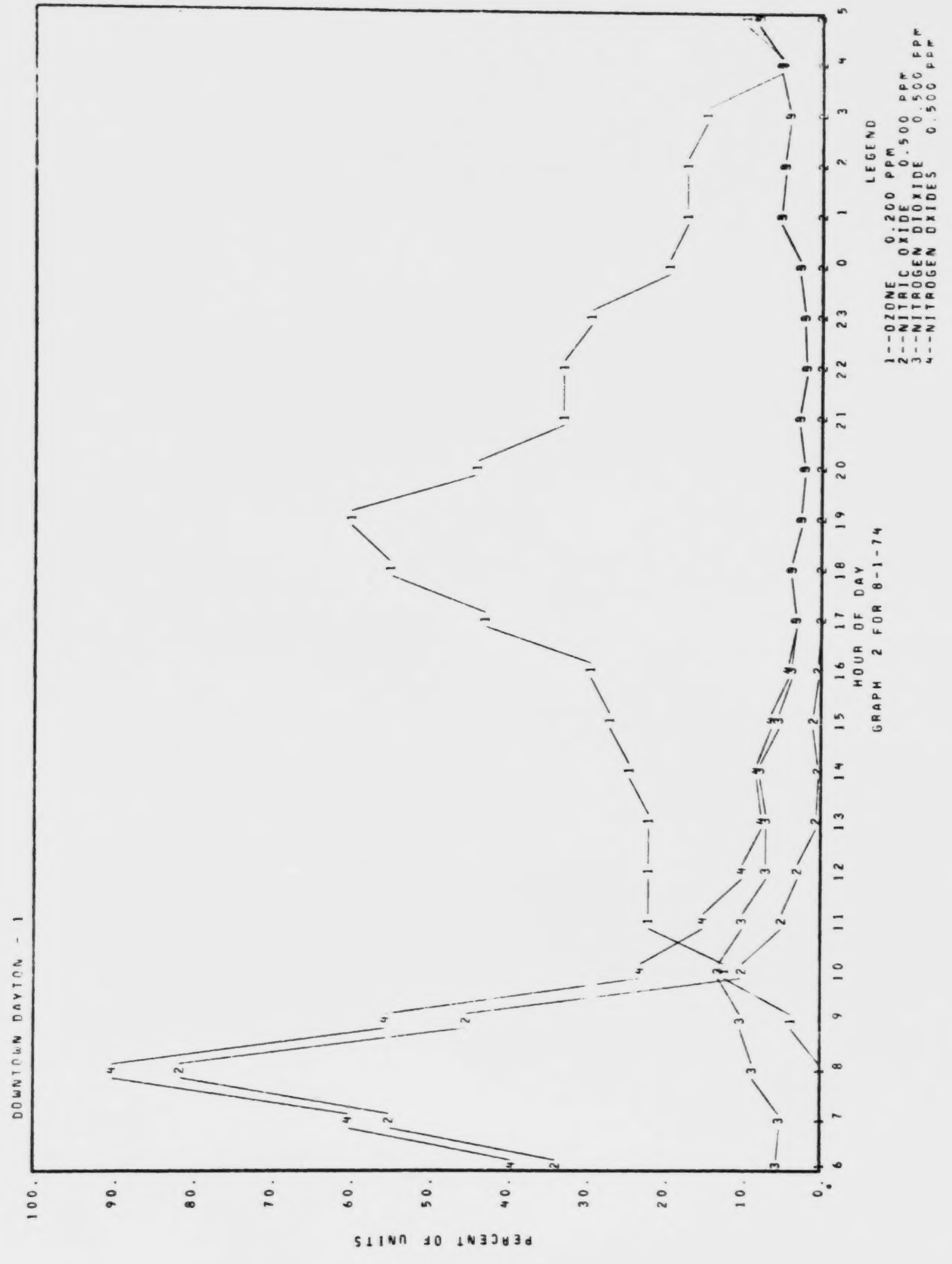
3--NITRIC ACID 0.000 PPM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HOUR OF DAY
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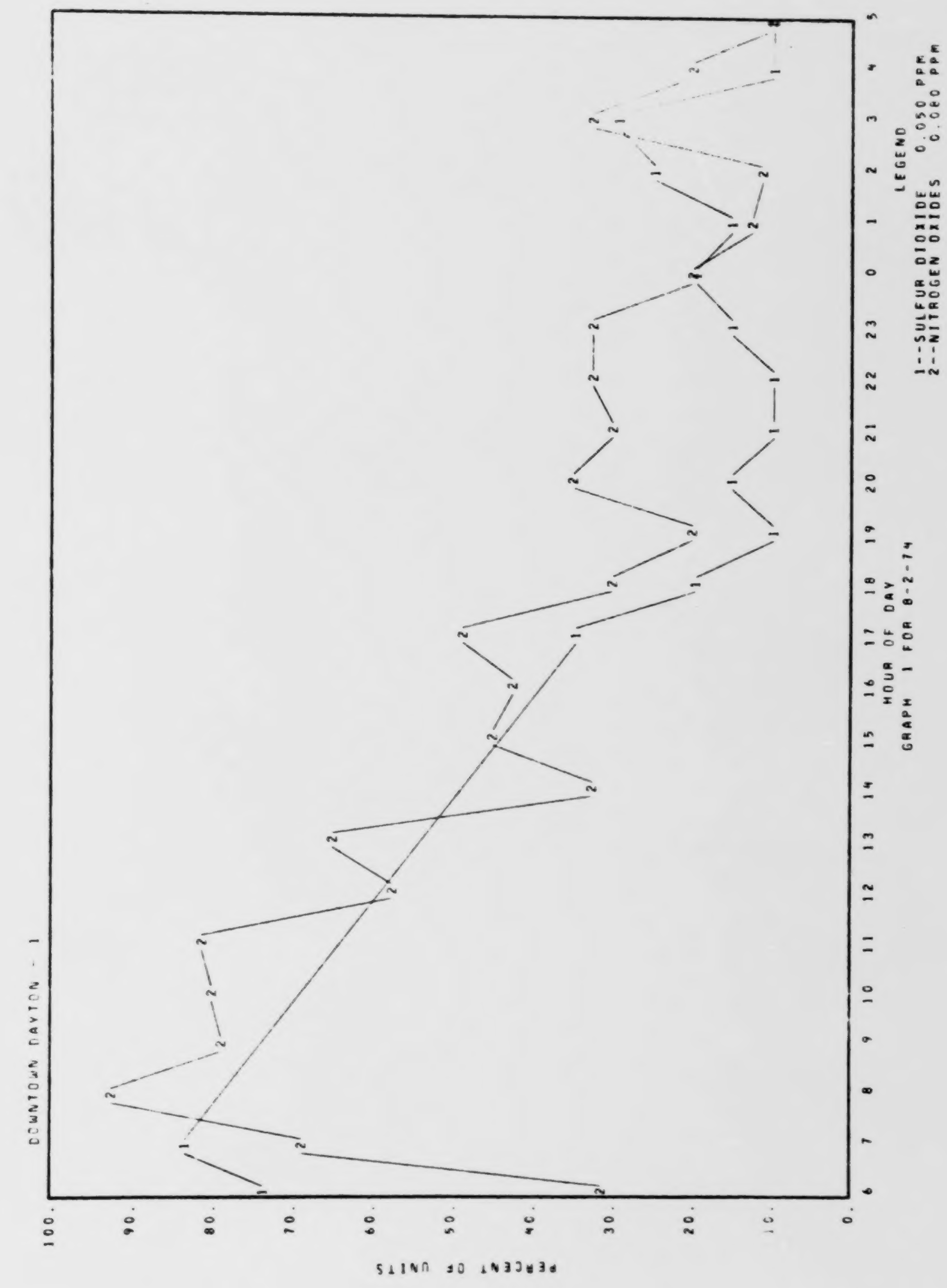
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90.
80.
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60.
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30.
20.
10.
0.
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HOUR OF DAY
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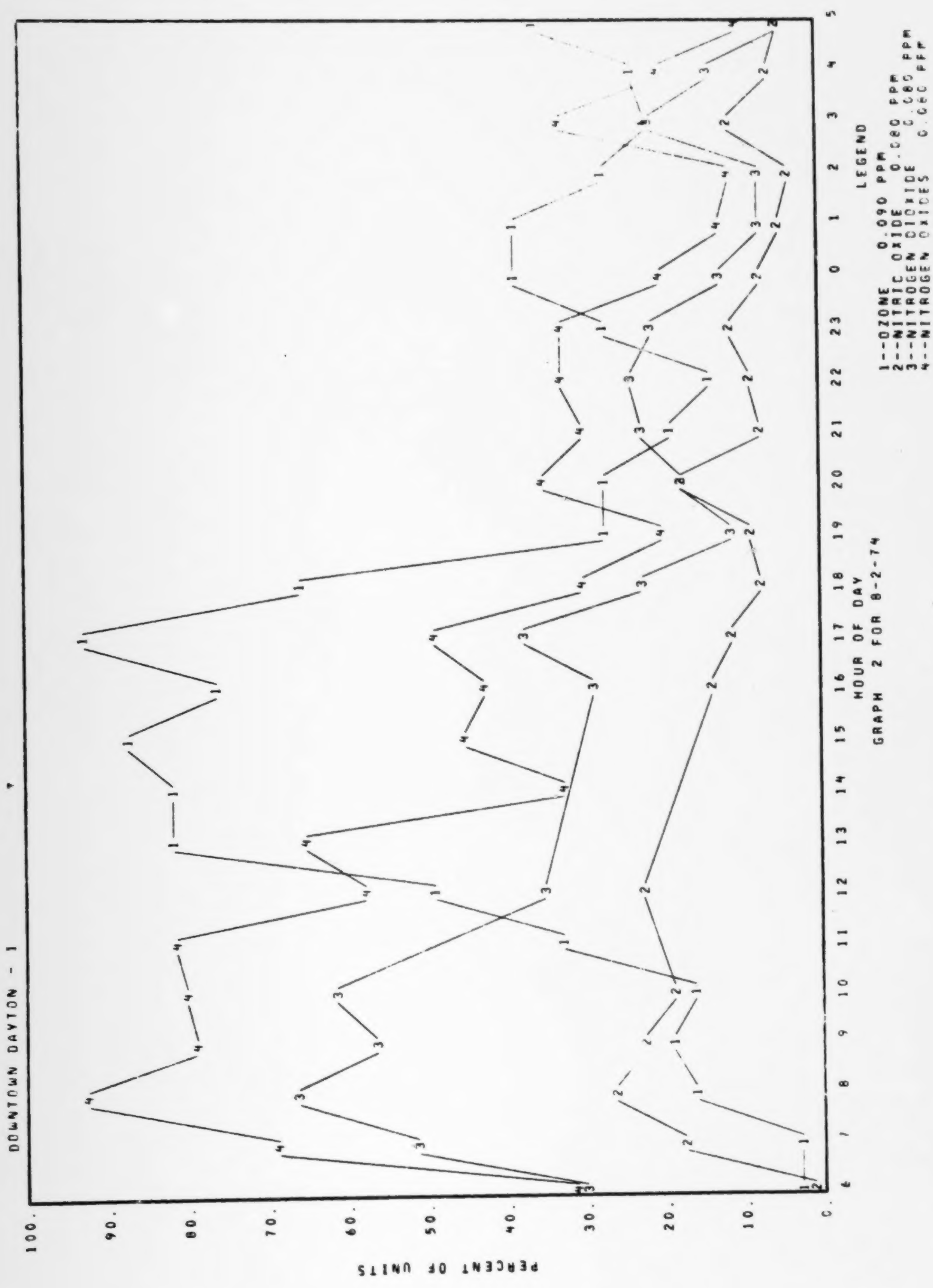

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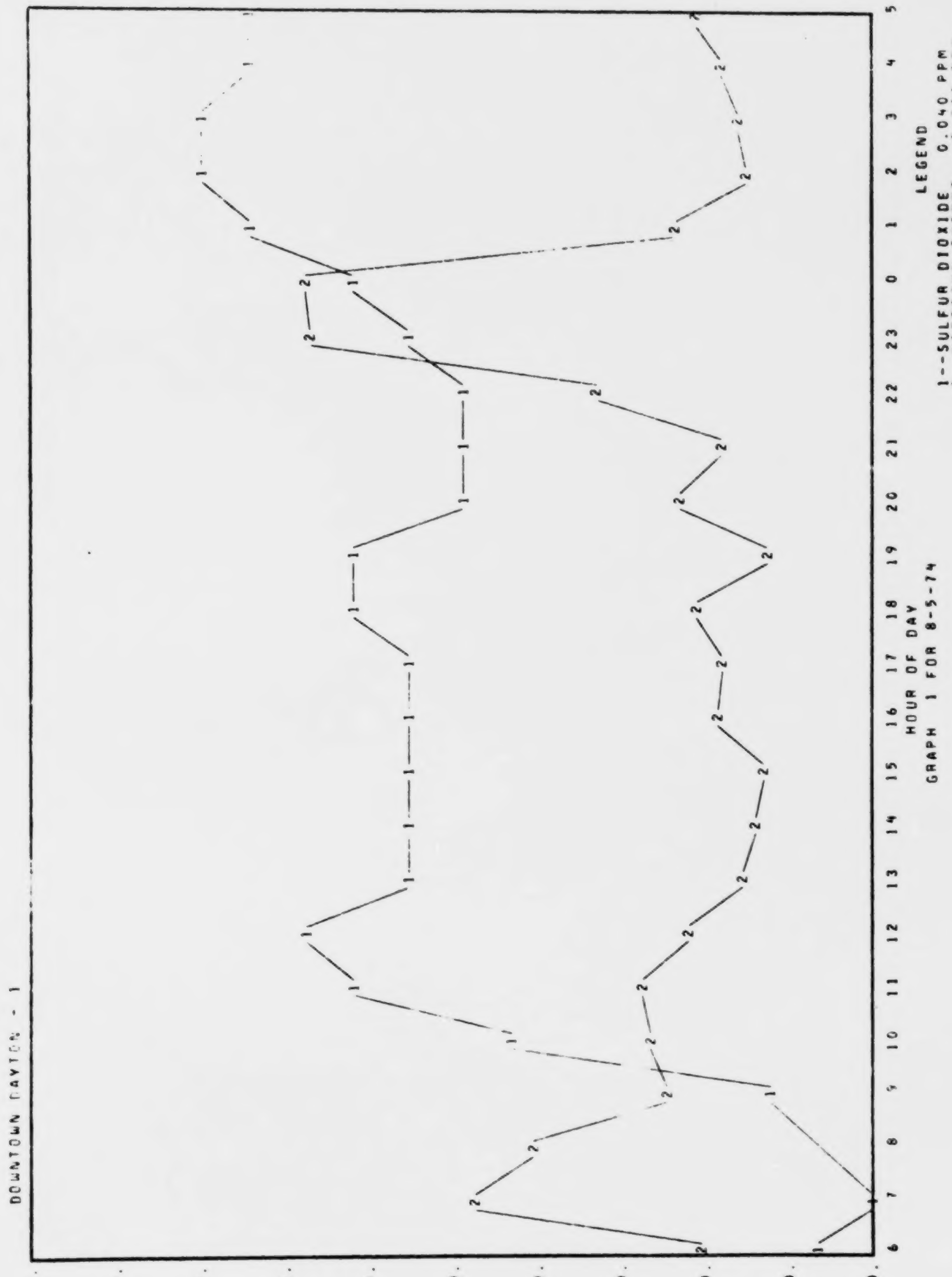
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70.
60.
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30.
20.
10.
0.
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HOUR OF DAY
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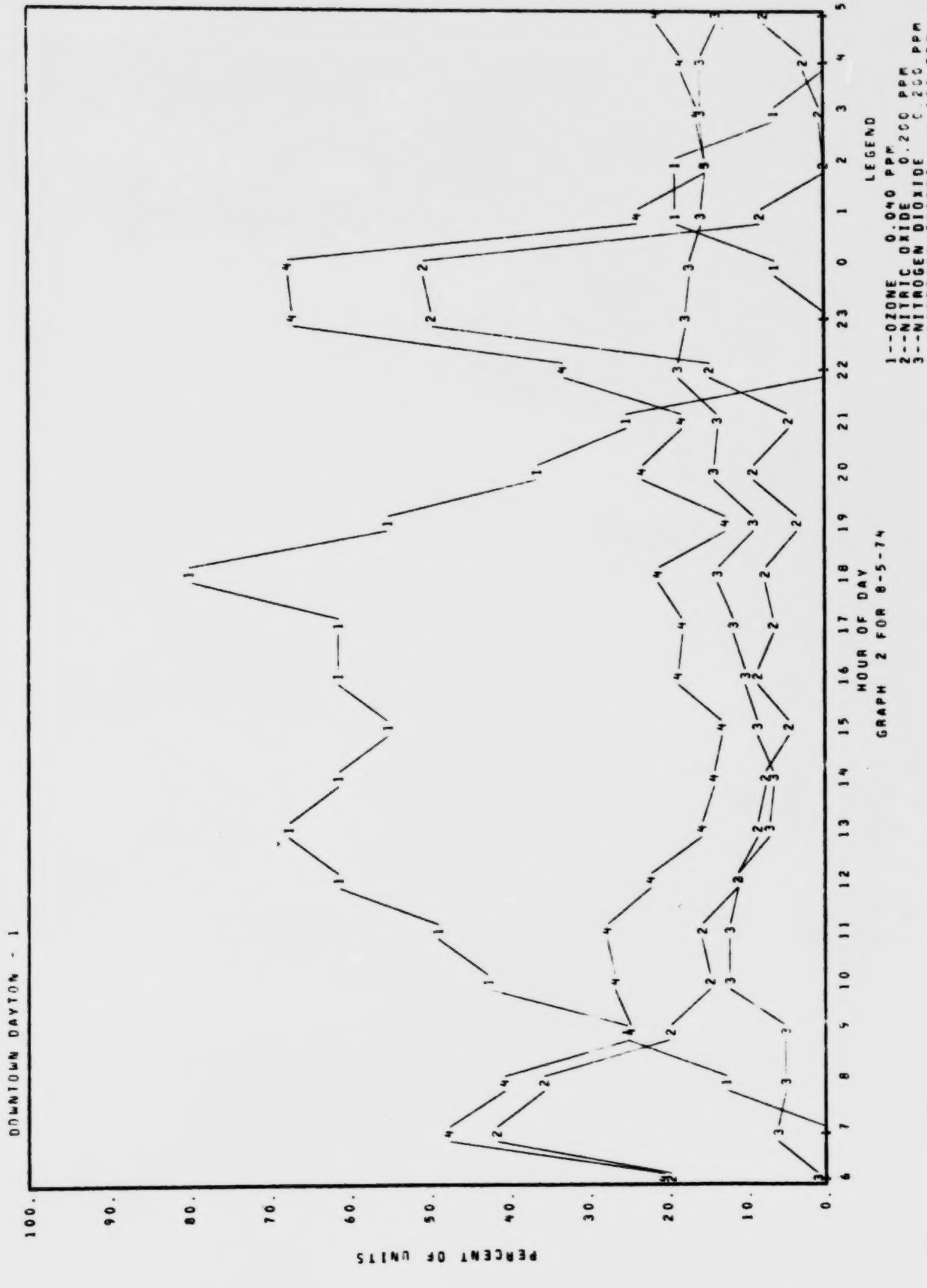
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0.
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HOUR OF DAY
GRAPH 2 FOR 8-5-74
LEGEND
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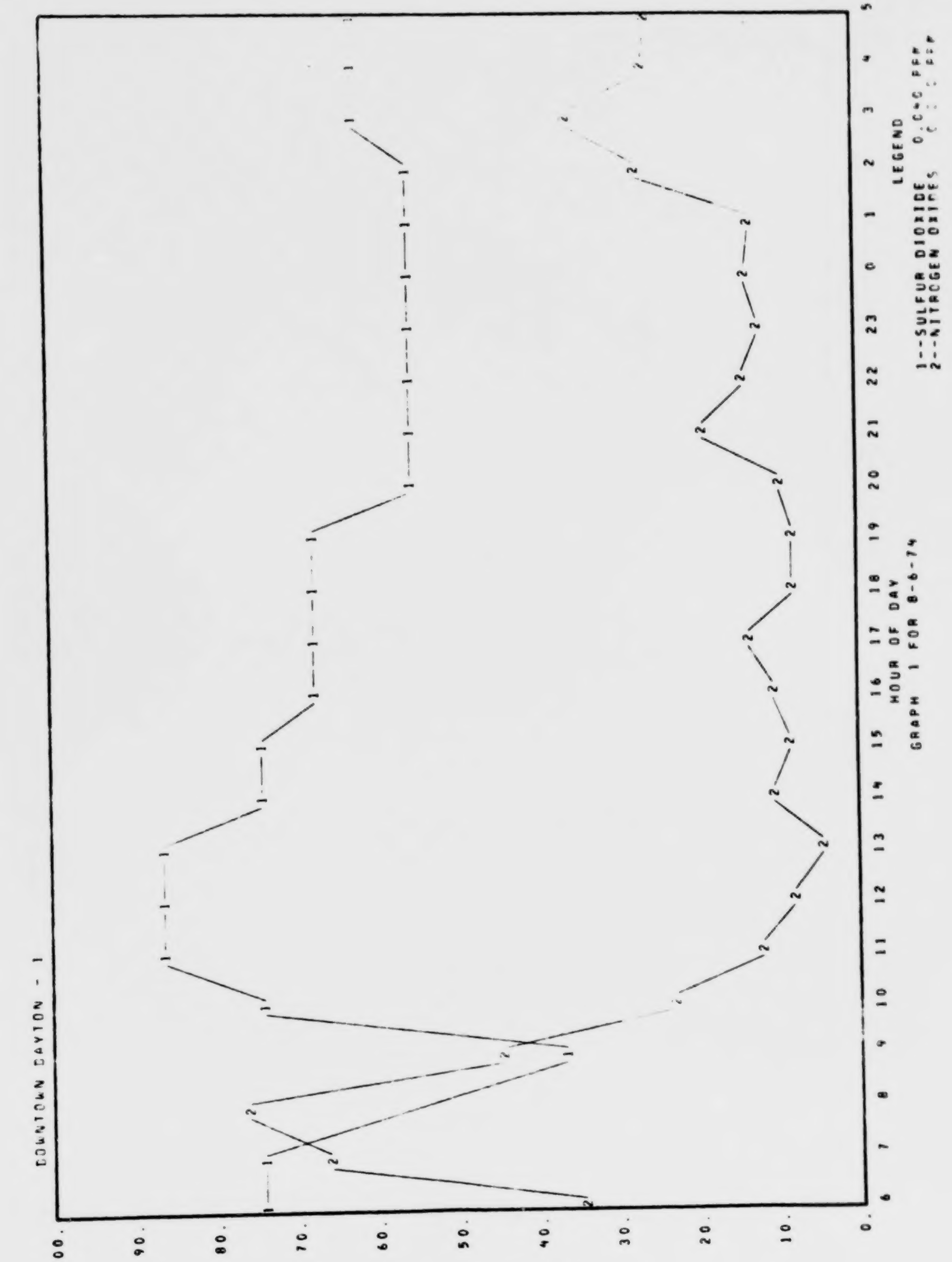
4--NITROGEN OXIDES 0.200 PPM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HOUR OF DAY
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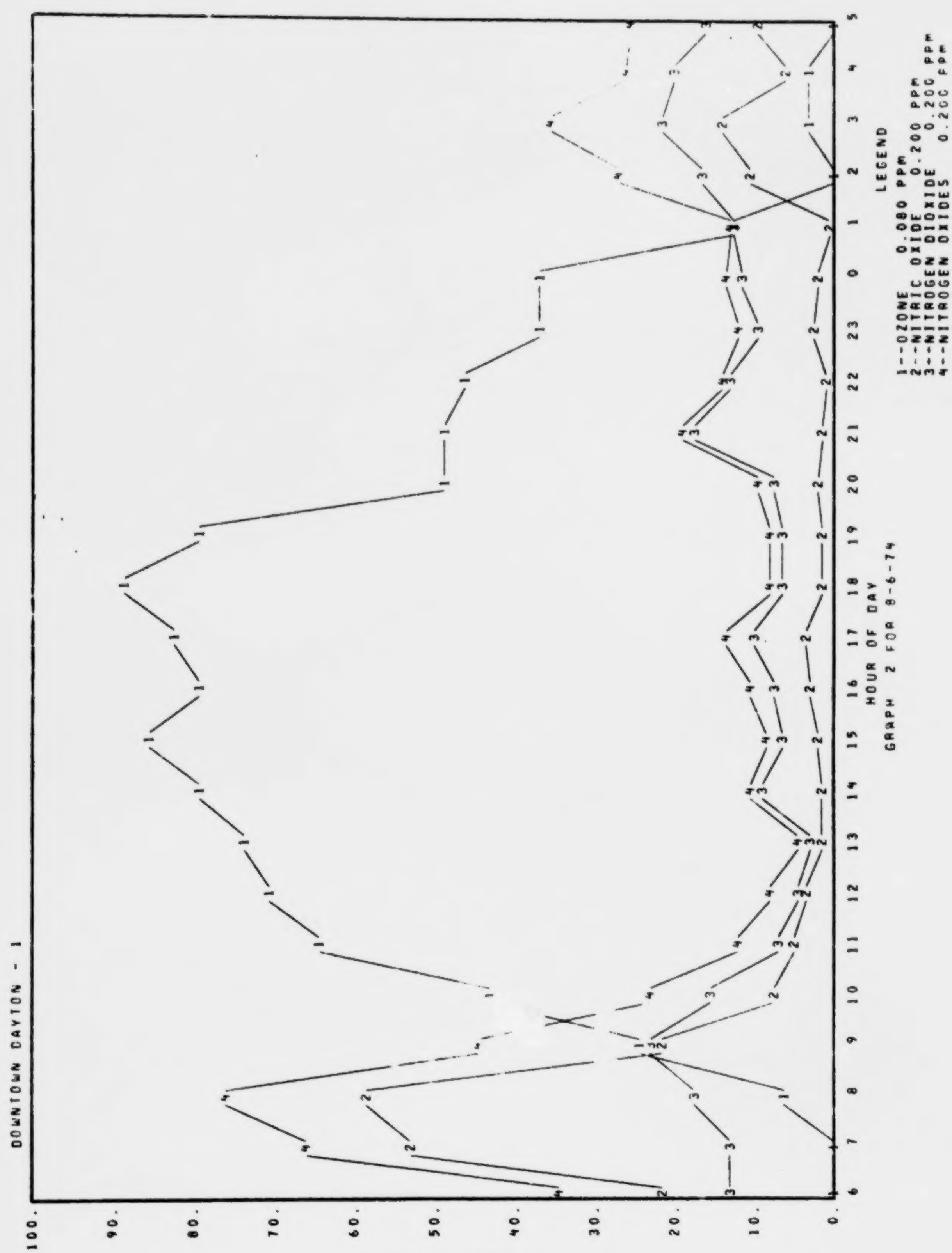
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PERCENT OF UNITS
HOUR OF DAY
GRAPH 2 FOR 8-6-74
LEGEND
1--OZONE 0.080 PPM
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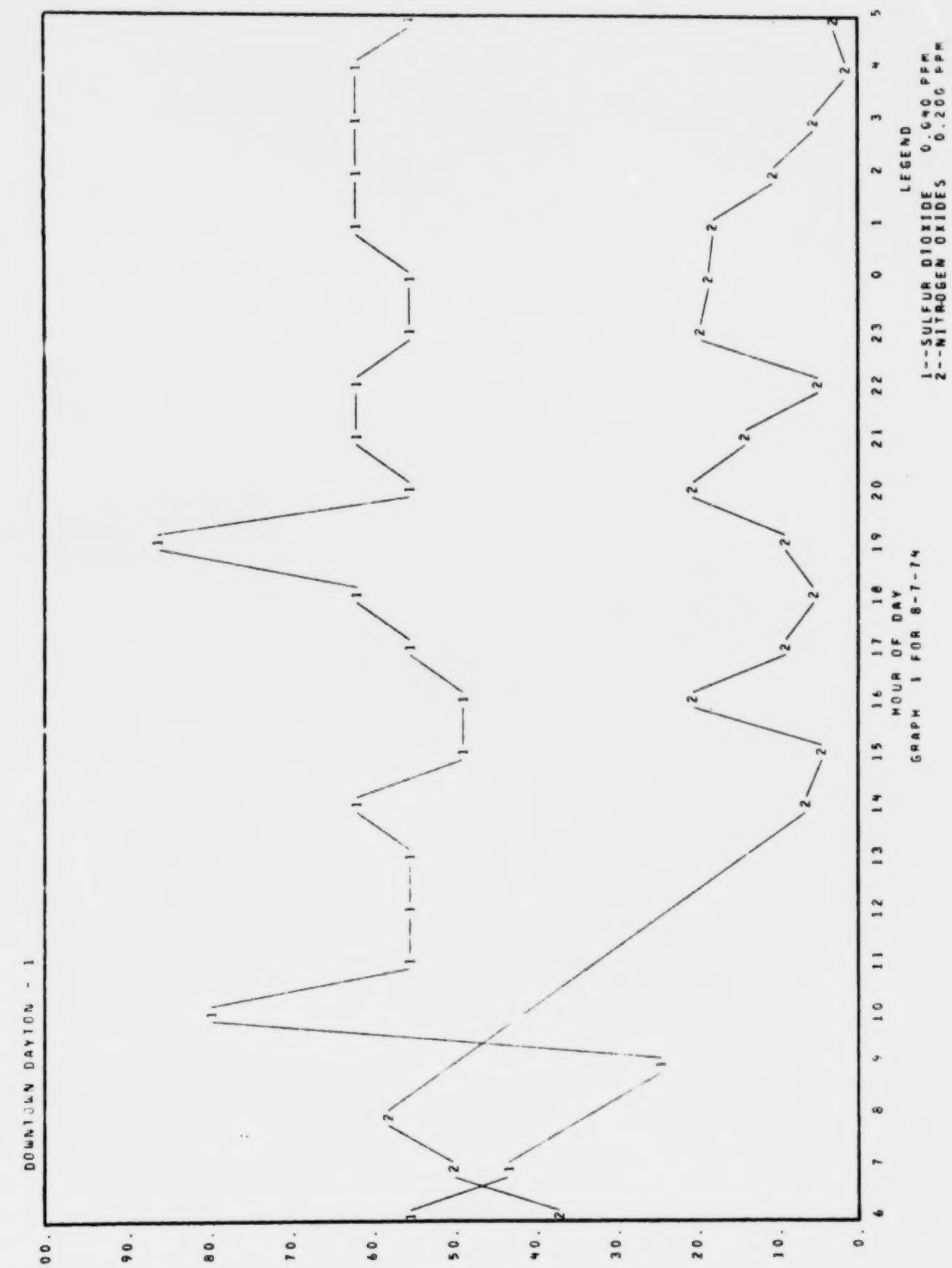
3--NITROGEN DIOXIDE 0.200 PPM
4--NITROGEN OXIDES 0.200 PPM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6
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8
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10
11
12
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14
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16
17
18
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20
21
22
23
0
1
2
3
4
5
HOUR OF DAY
GRAPH 1 FOR 8-7-74
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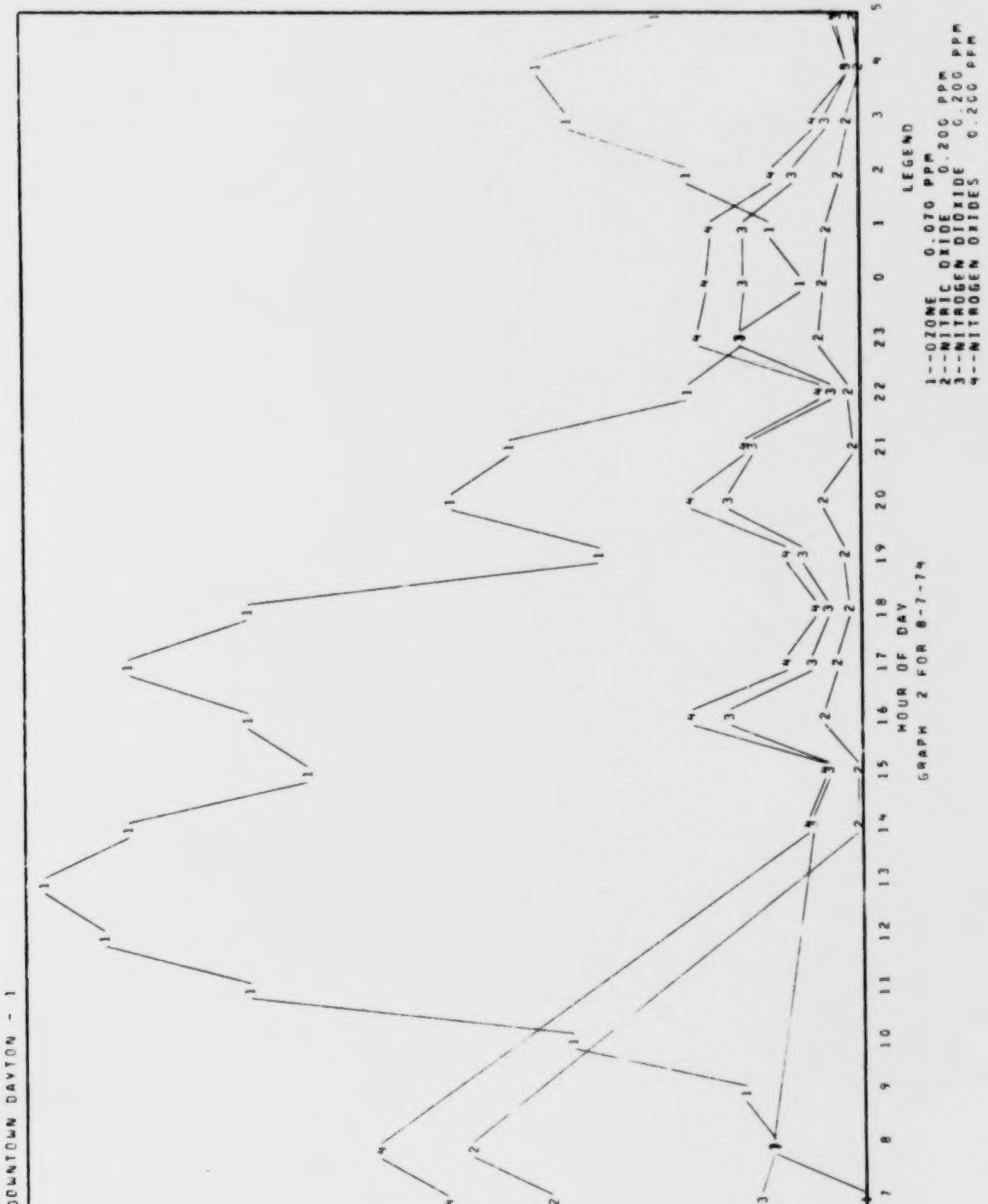
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PERCENT OF UNITS
HOUR OF DAY
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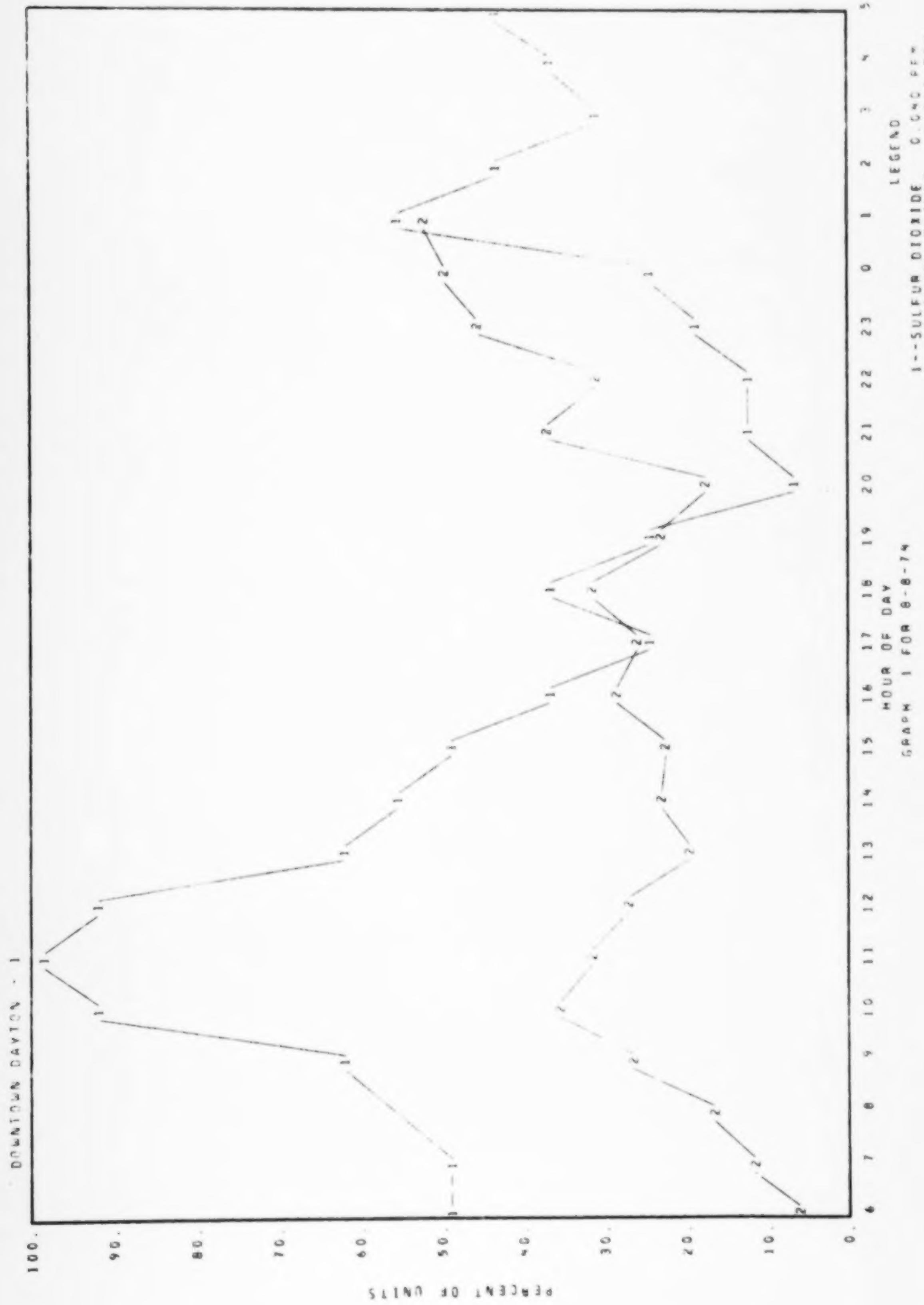
4--NITROGEN OXIDES 0.200 PPM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HOUR OF DAY
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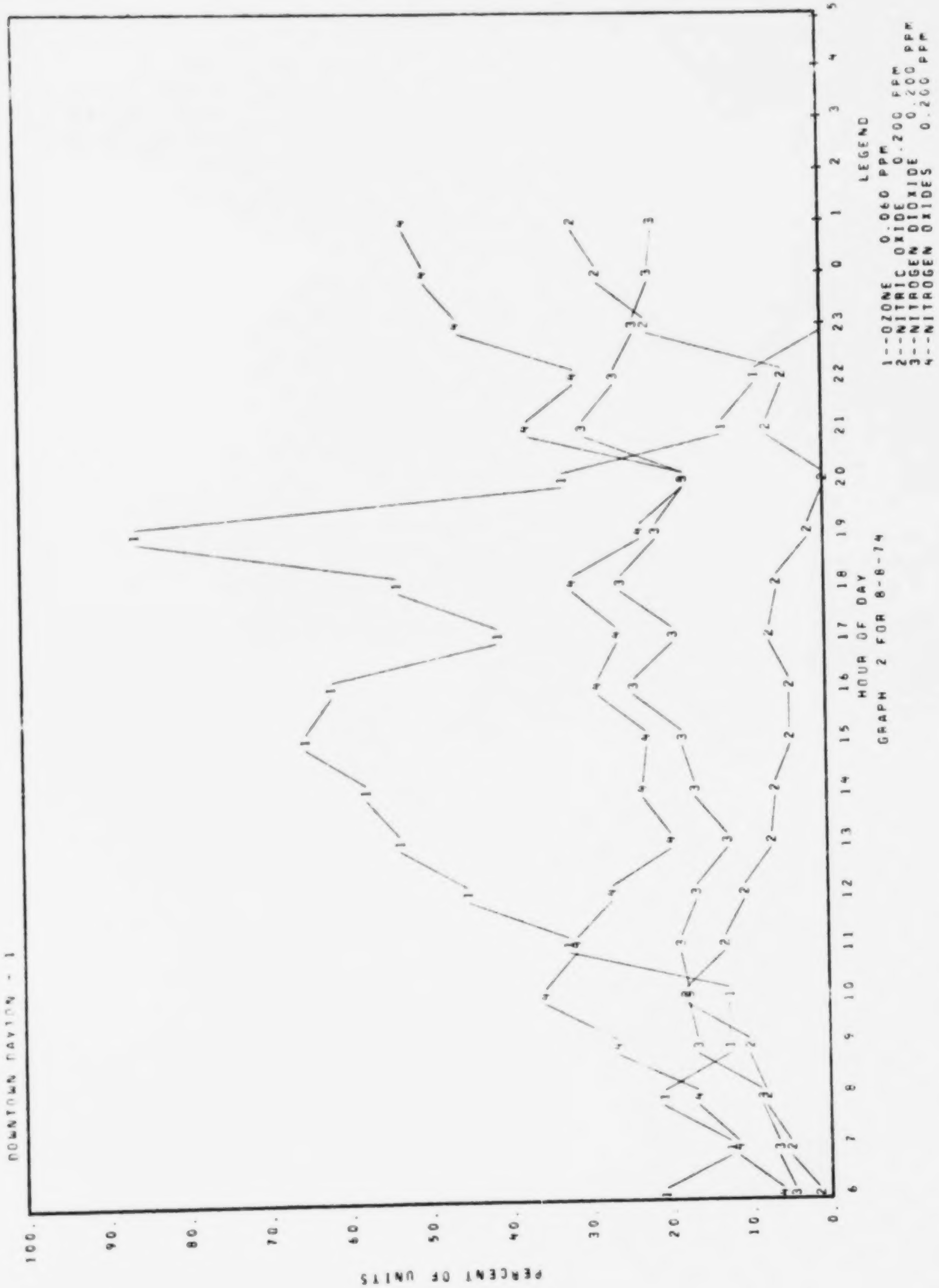
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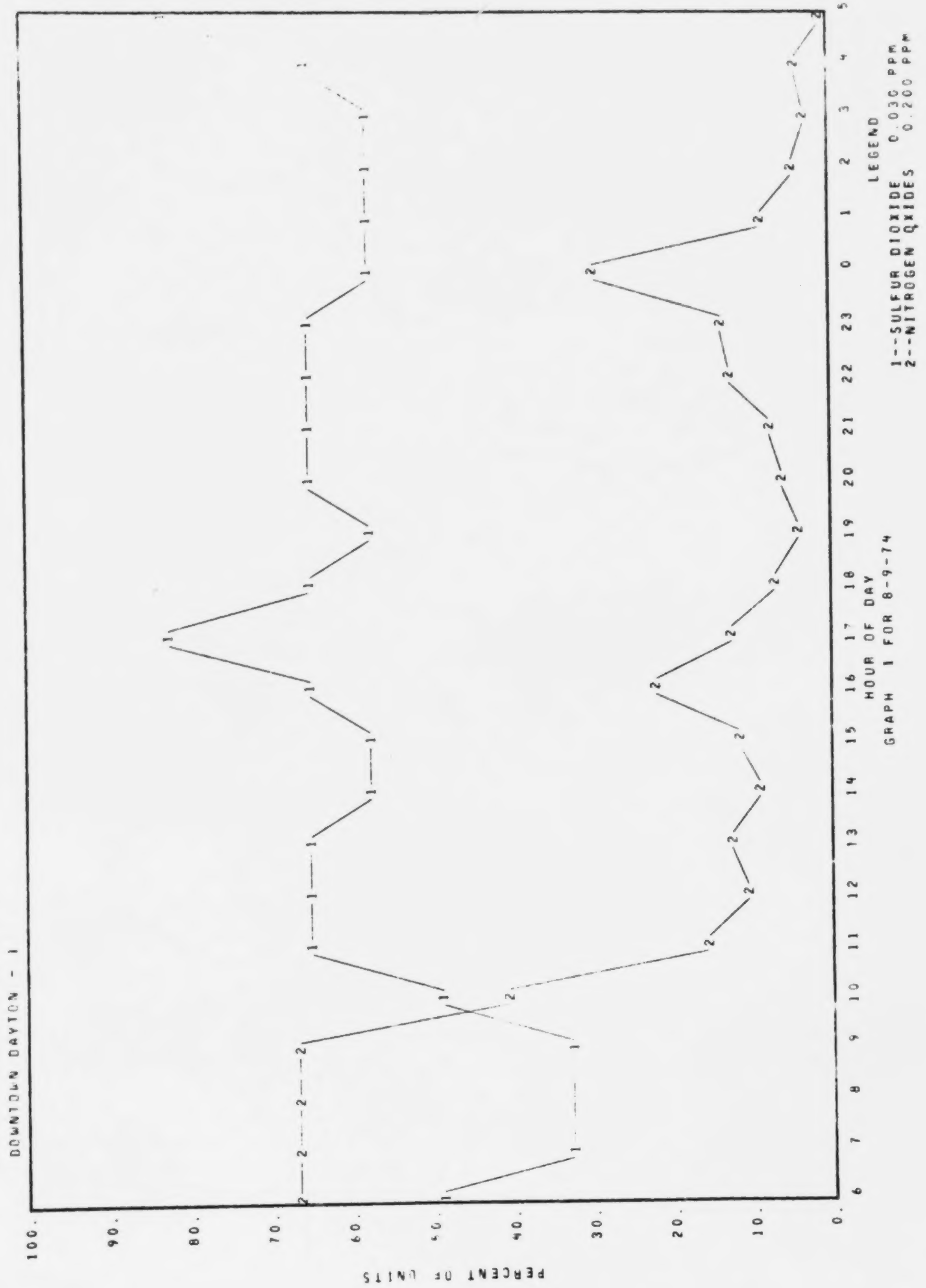
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR 8-8-74
LEGEND
1--OZONE 0.060 PPM
2--NITRIC OXIDE 0.200 PPM
3--NITROGEN DIOXIDE 0.200 PPM
4--NITROGEN OXIDES 0.200 PPM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100.
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70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 1 FOR 8-9-74
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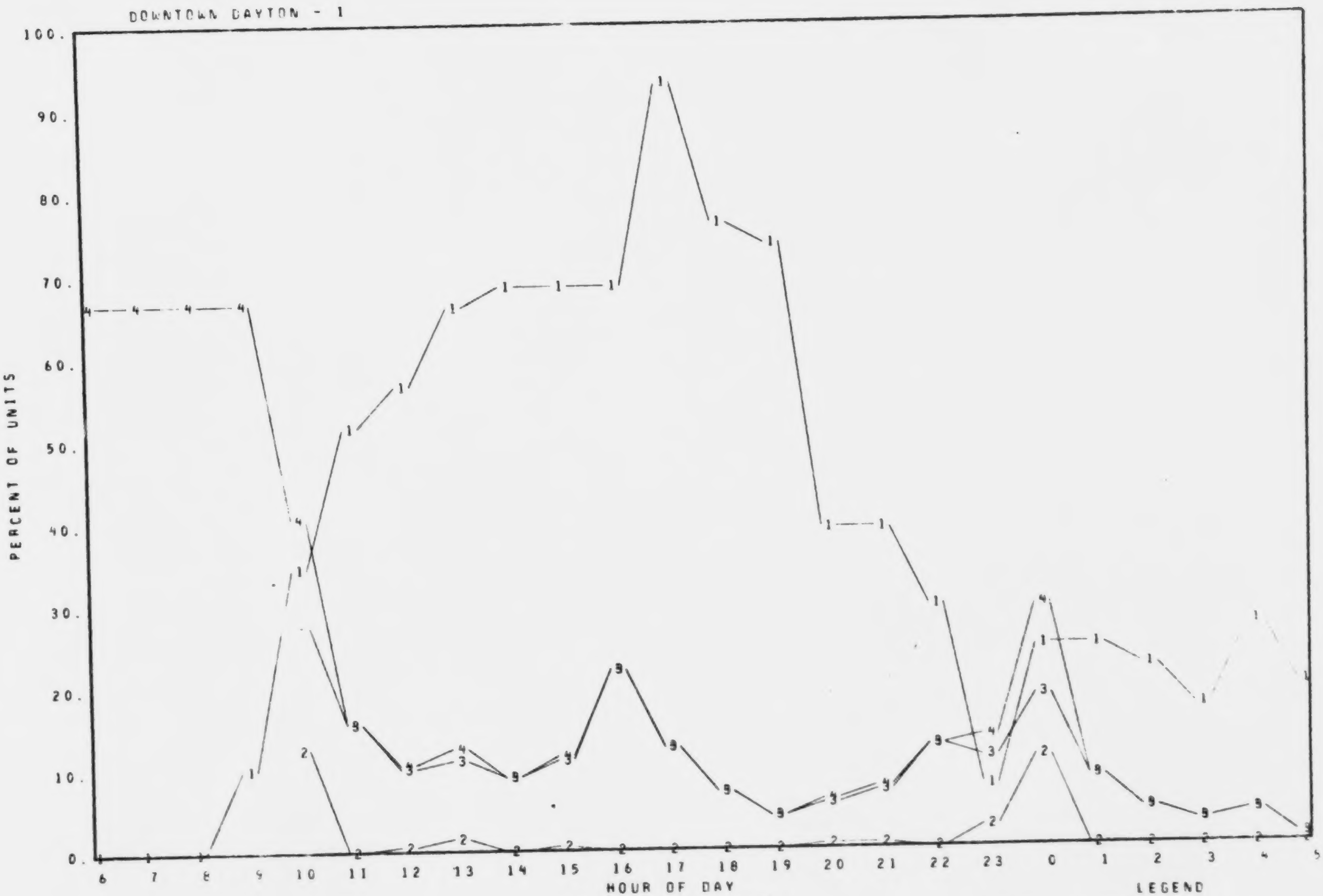
2--NITROGEN OXIDES 0.200 PPM



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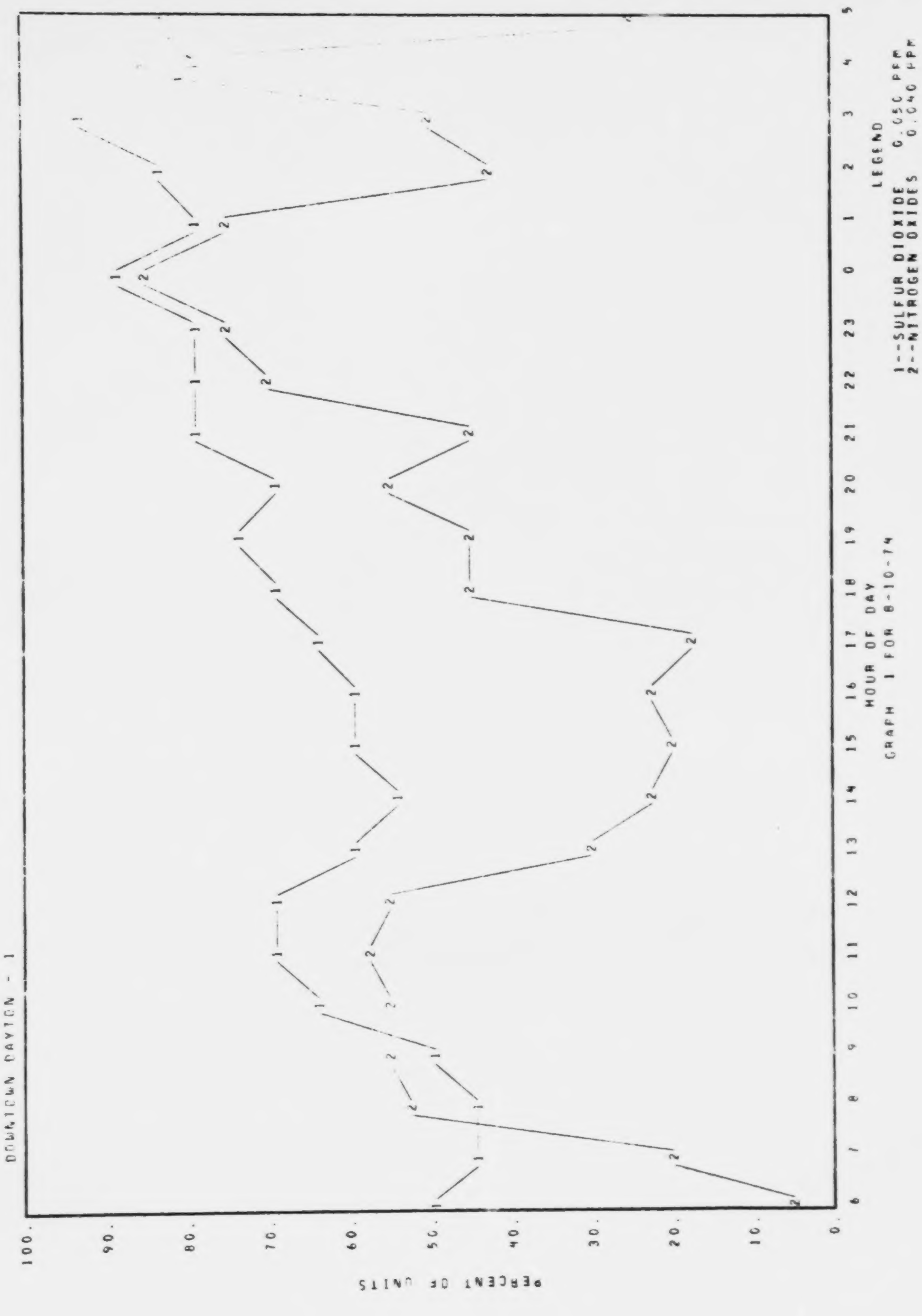
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HOUR OF DAY
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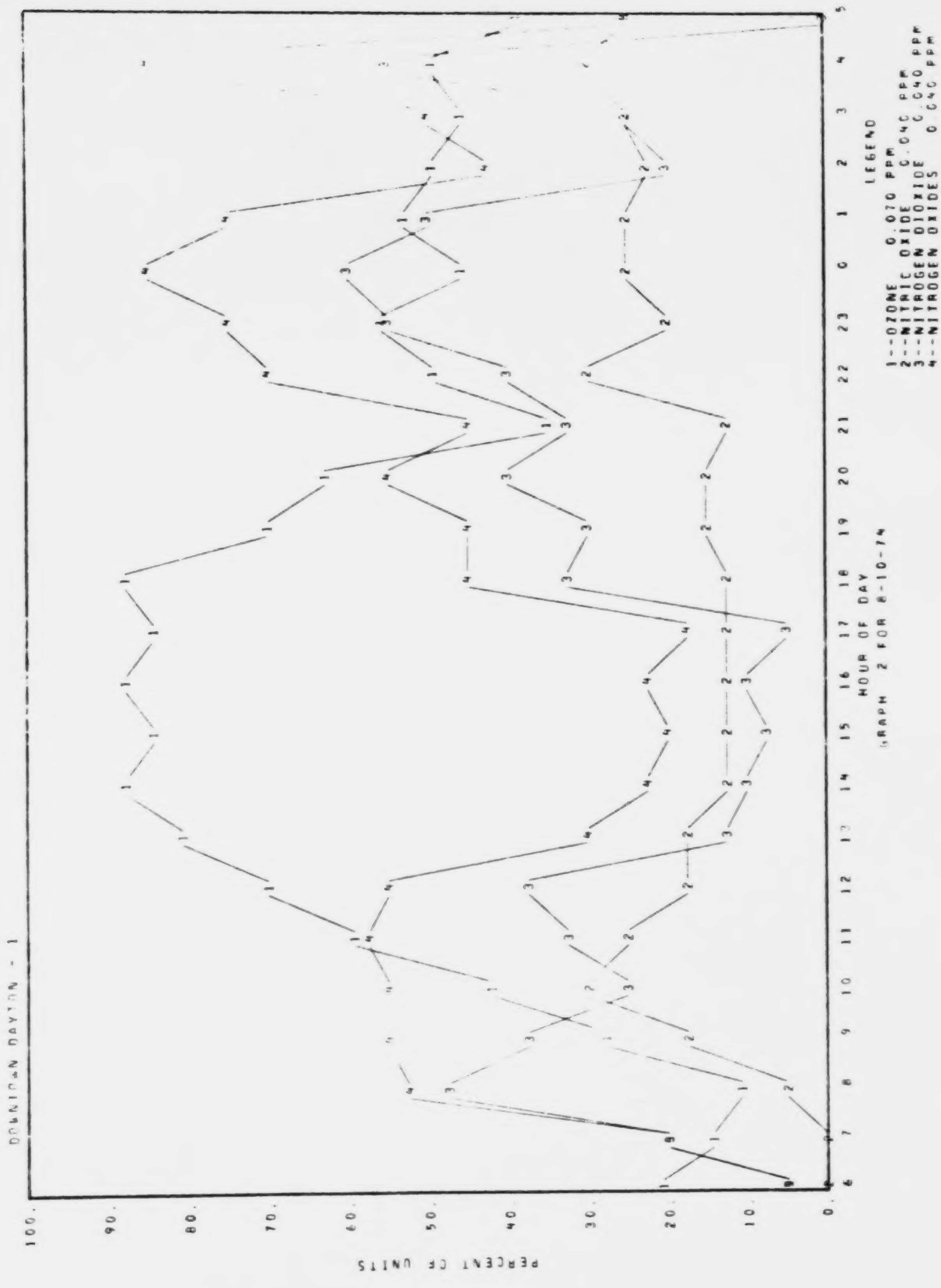
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PERCENT OF UNITS
HOUR OF DAY
GRAPH 2 FOR 8-10-74
LEGEND
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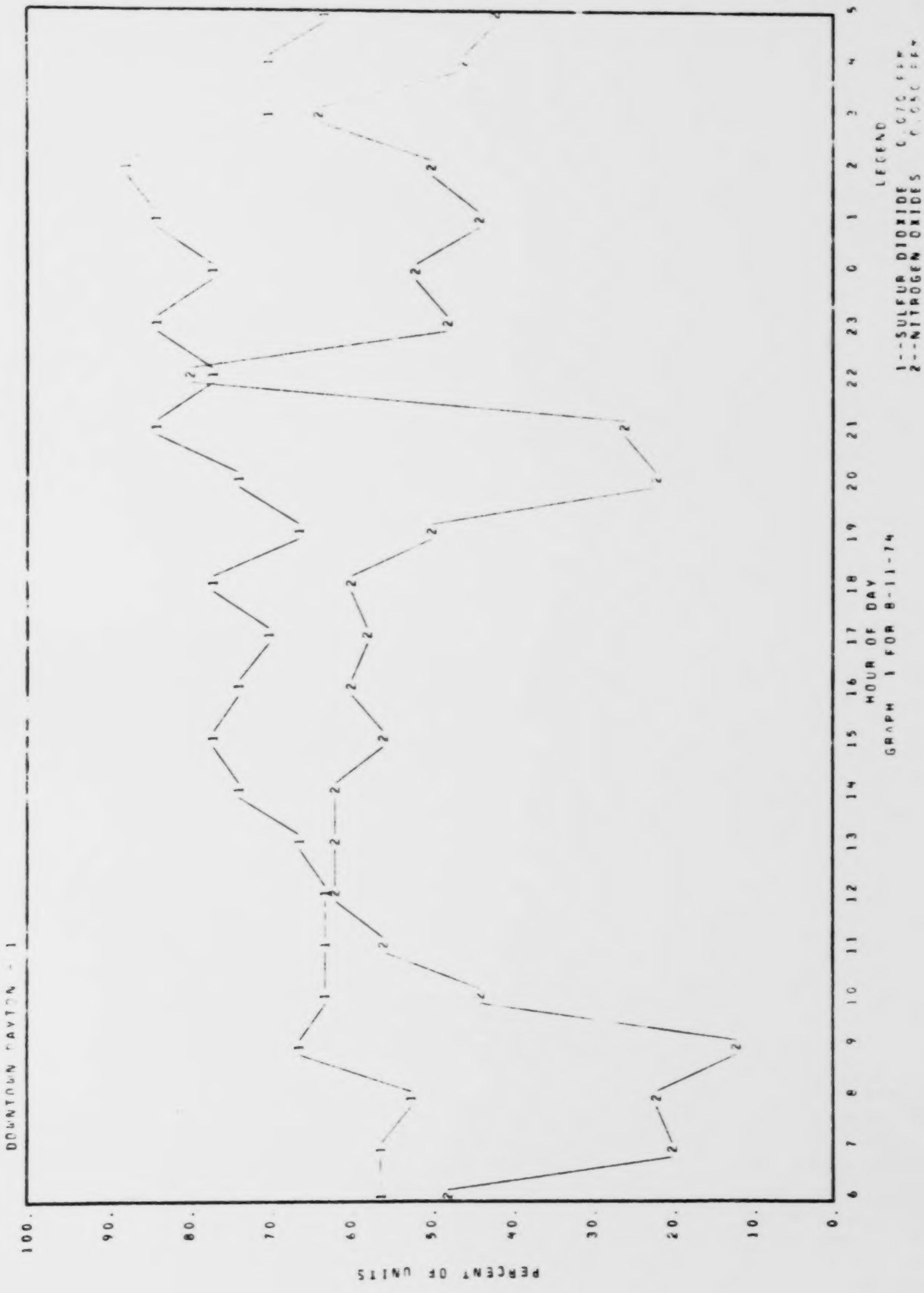
3--NITROGEN DIOXIDE 0.040 PPM
4--NITROGEN OXIDES 0.040 PPM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HOUR OF DAY
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LEGEND
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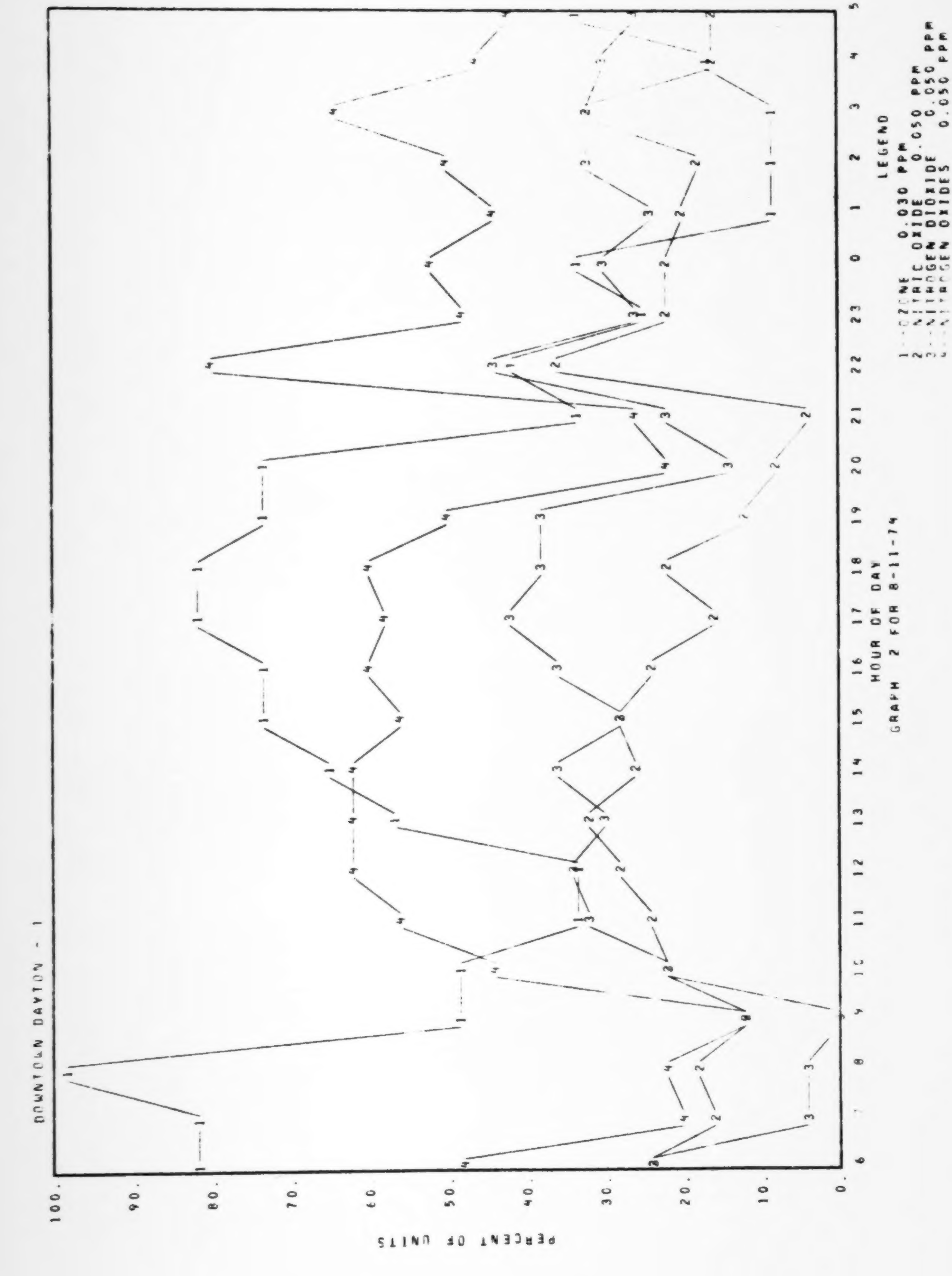
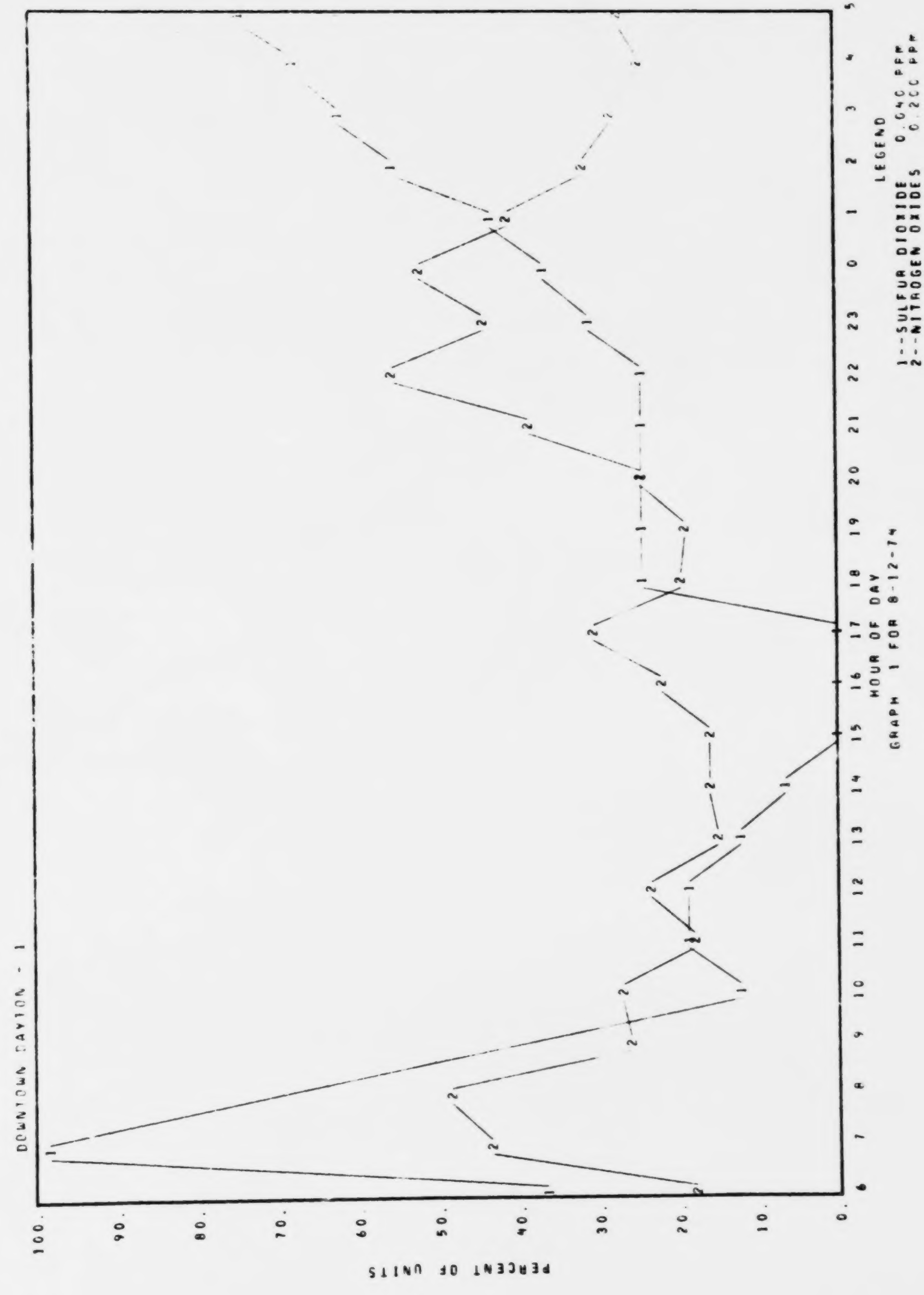
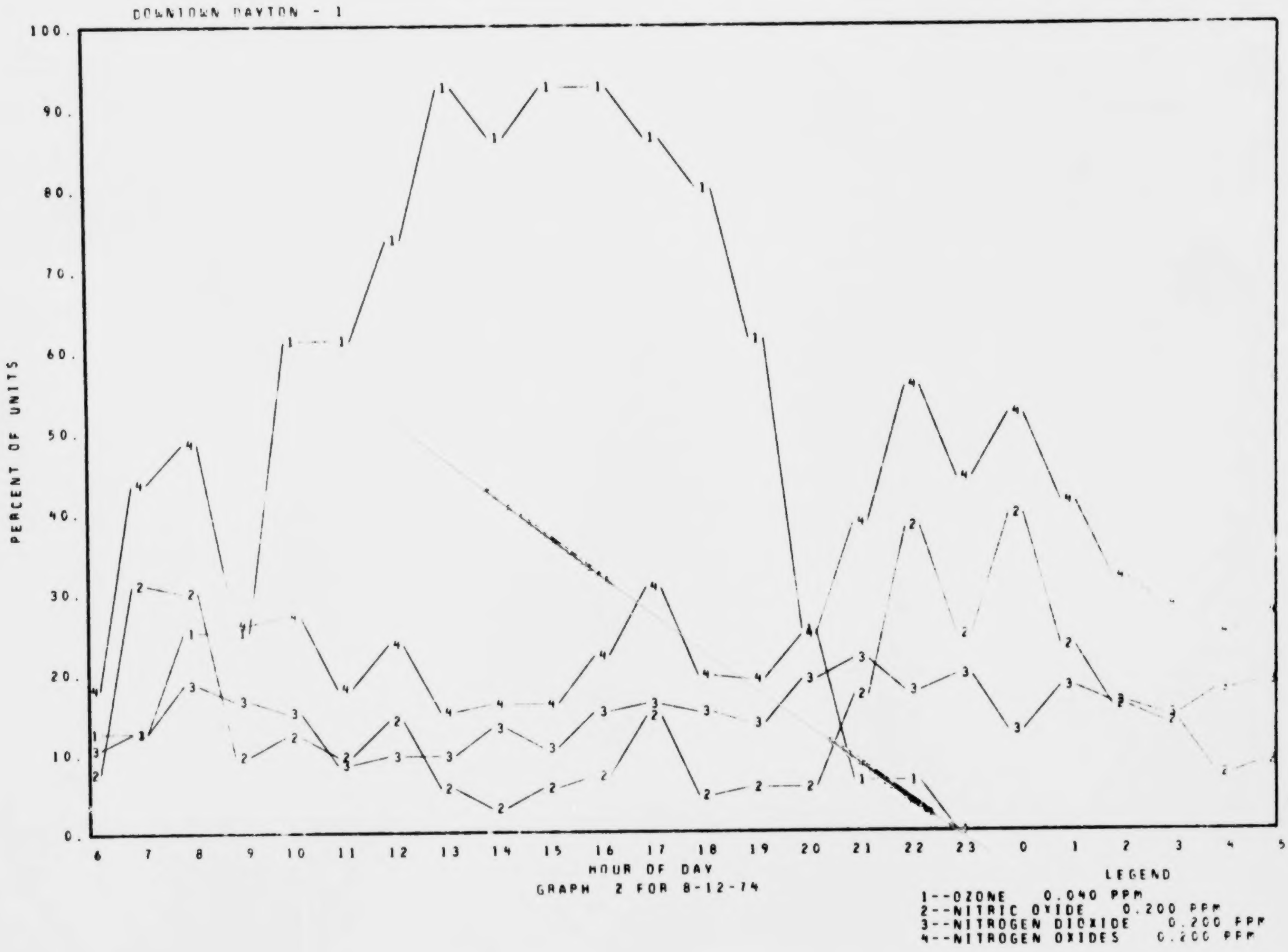
2--NITROGEN OXIDES



GRAPH 2 FOR 8-11-74

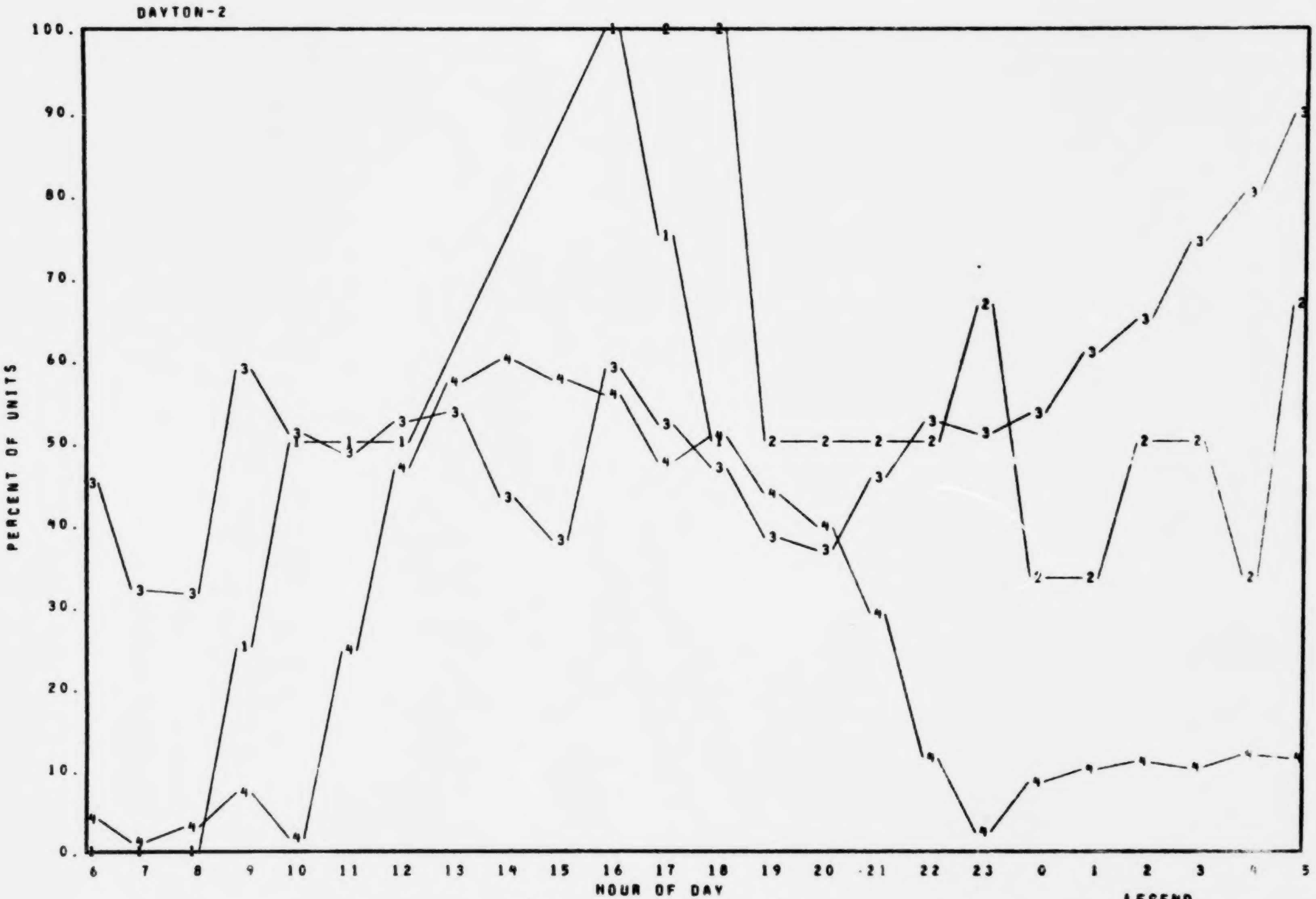


GRAPH 1 FOR 8-12-74


DOWNTOWN DAYTON - 1
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR 8-12-74
LEGEND
1--OZONE 0.040 PPM
2--NITRIC OXIDE 0.200 PPM
3--NITROGEN DIOXIDE 0.200 PPM
4--NITROGEN OXIDES 0.200 PPM

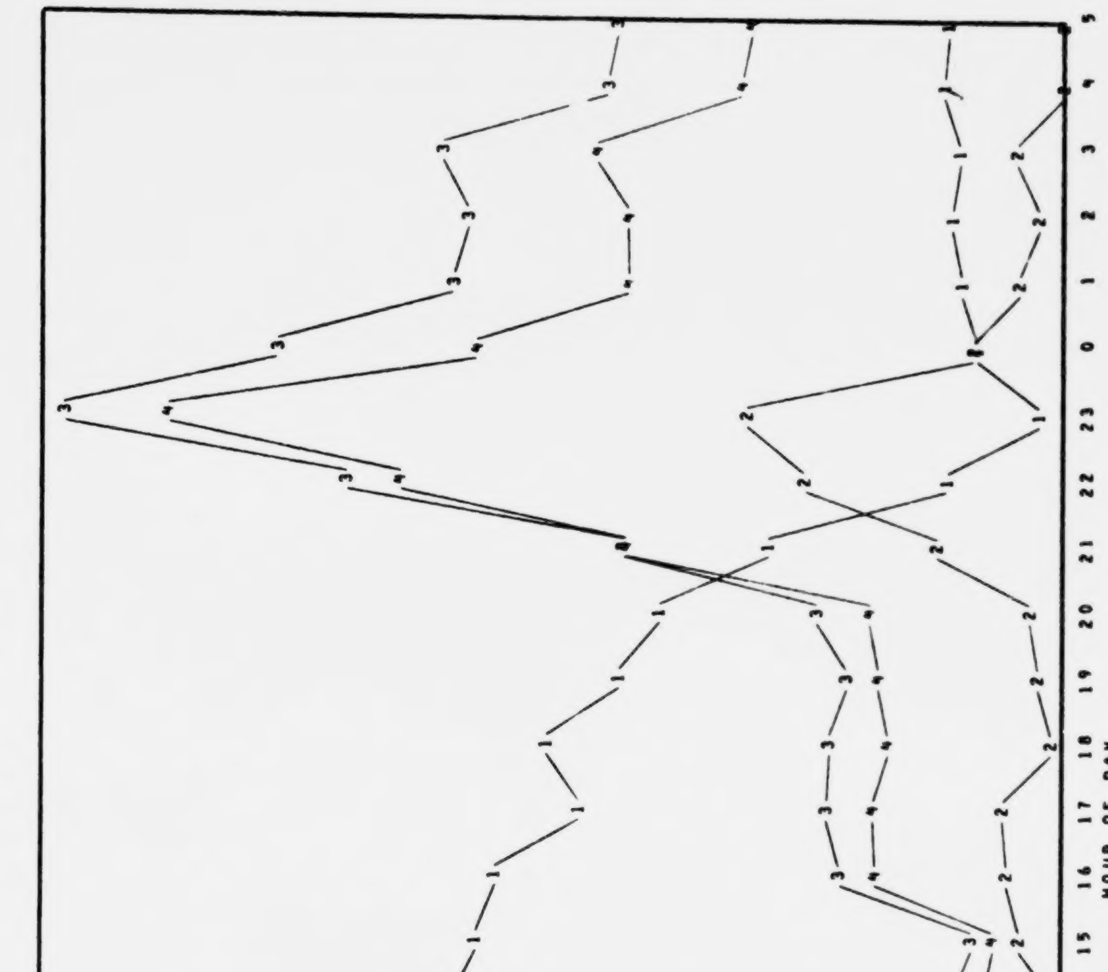
APPENDIX B

HUBER HEIGHTS (SITE 2) RESULTS



GRAPH 1 FOR JULY 17, 1974

LEGEND
1--PAN 0.009 PPM
2--NITRIC ACID 0.006 PPM
3--LIGHT SCATTERING 3.000
4--OZONE 0.200 PPM

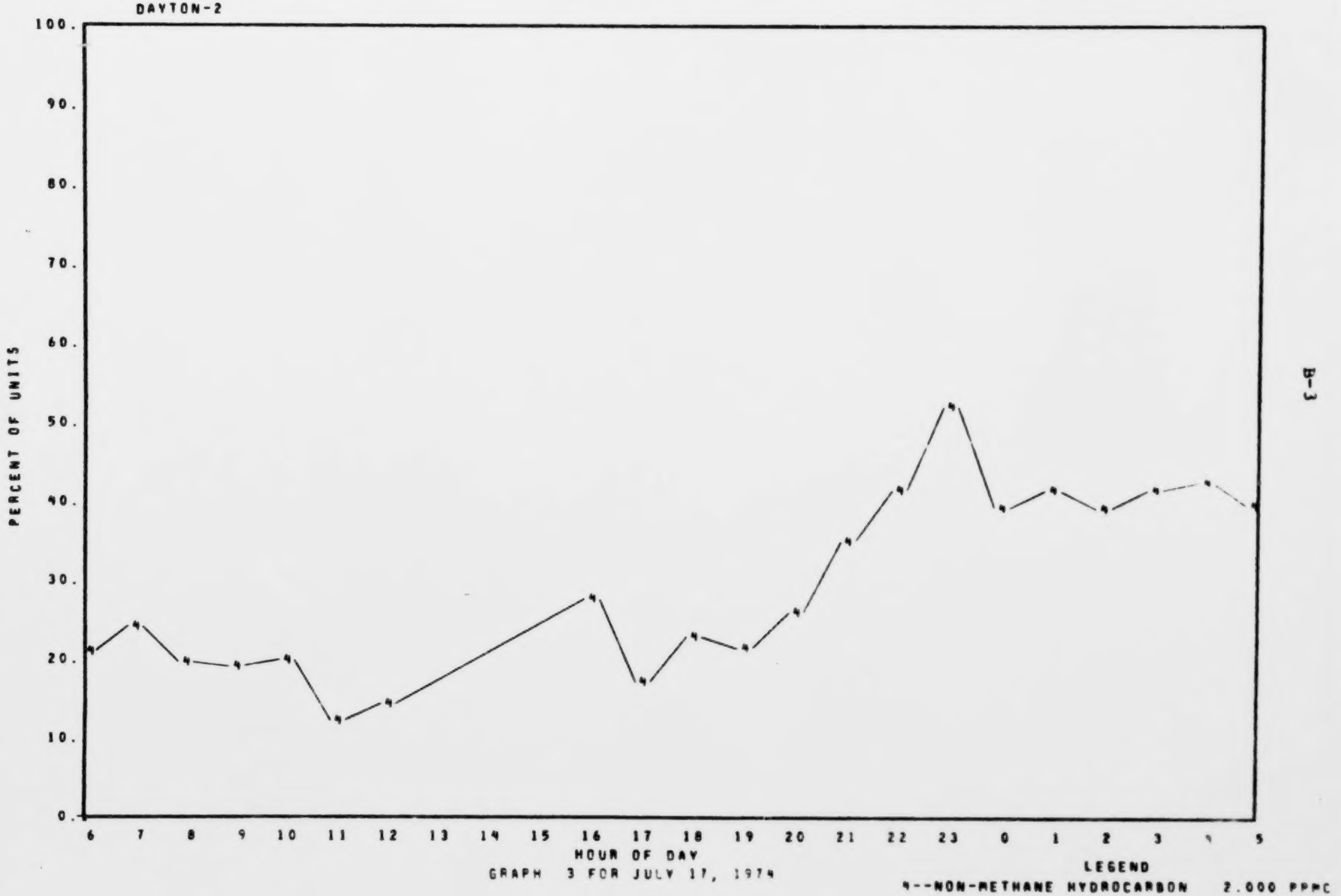


HOUR OF DAY

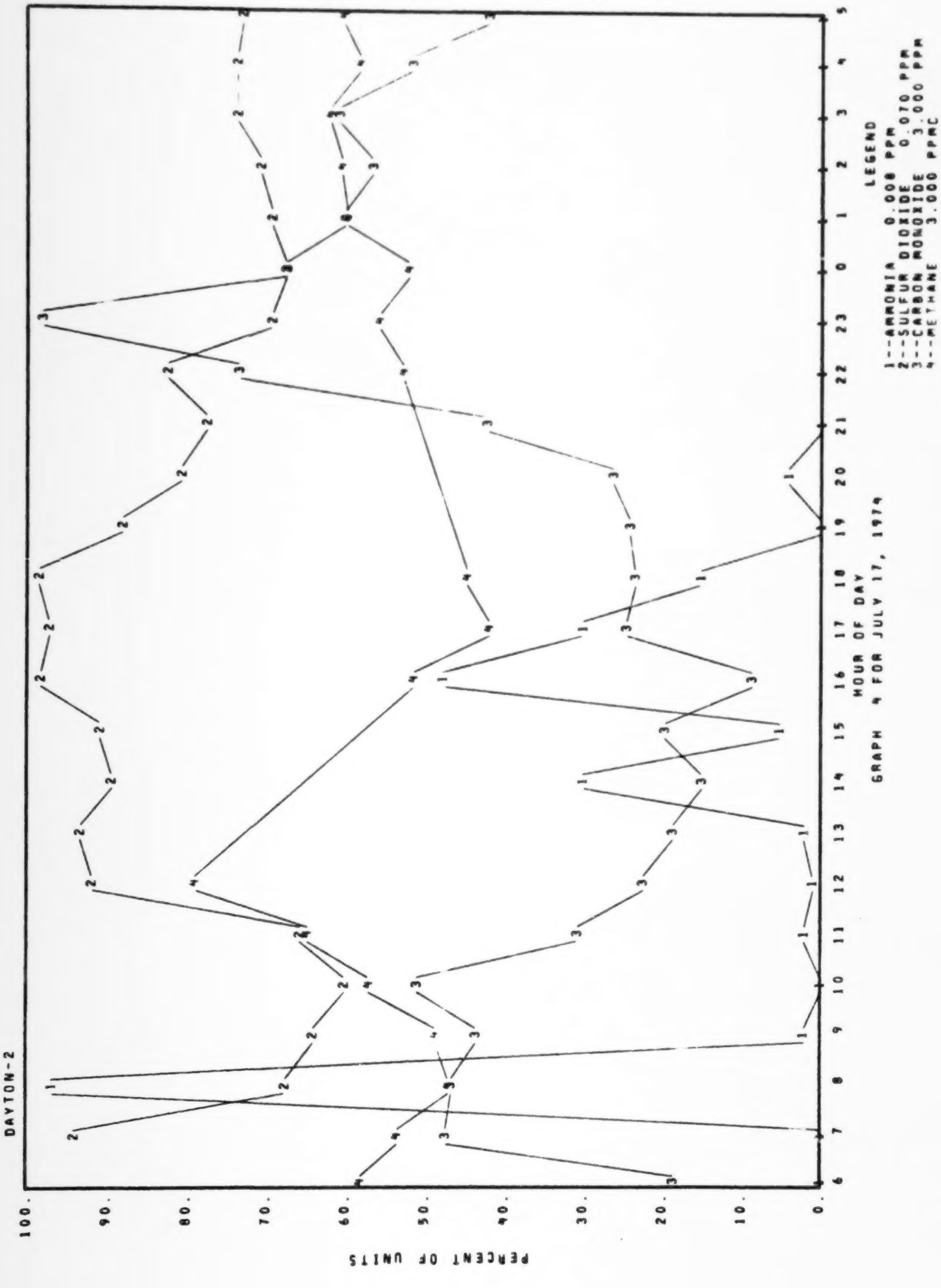
GRAPH 2 FOR JULY 17, 1974

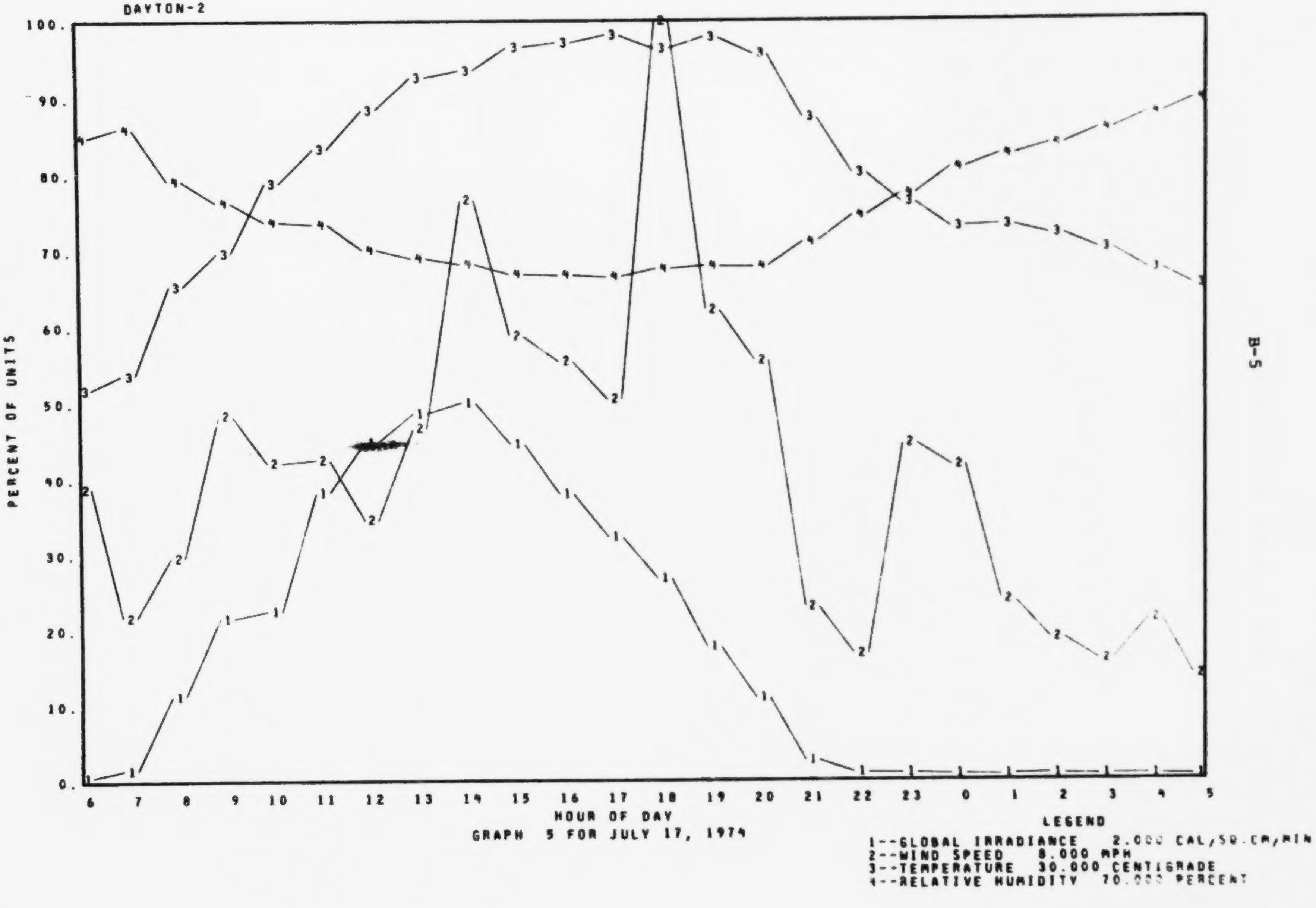
LEGEND

1--OZONE 0.200 PPM
2--NITRIC OXIDE 0.060 PPM
3--NITROGEN DIOXIDE 0.060 PPM
4--NITROGEN OXIDES 0.090 PPM

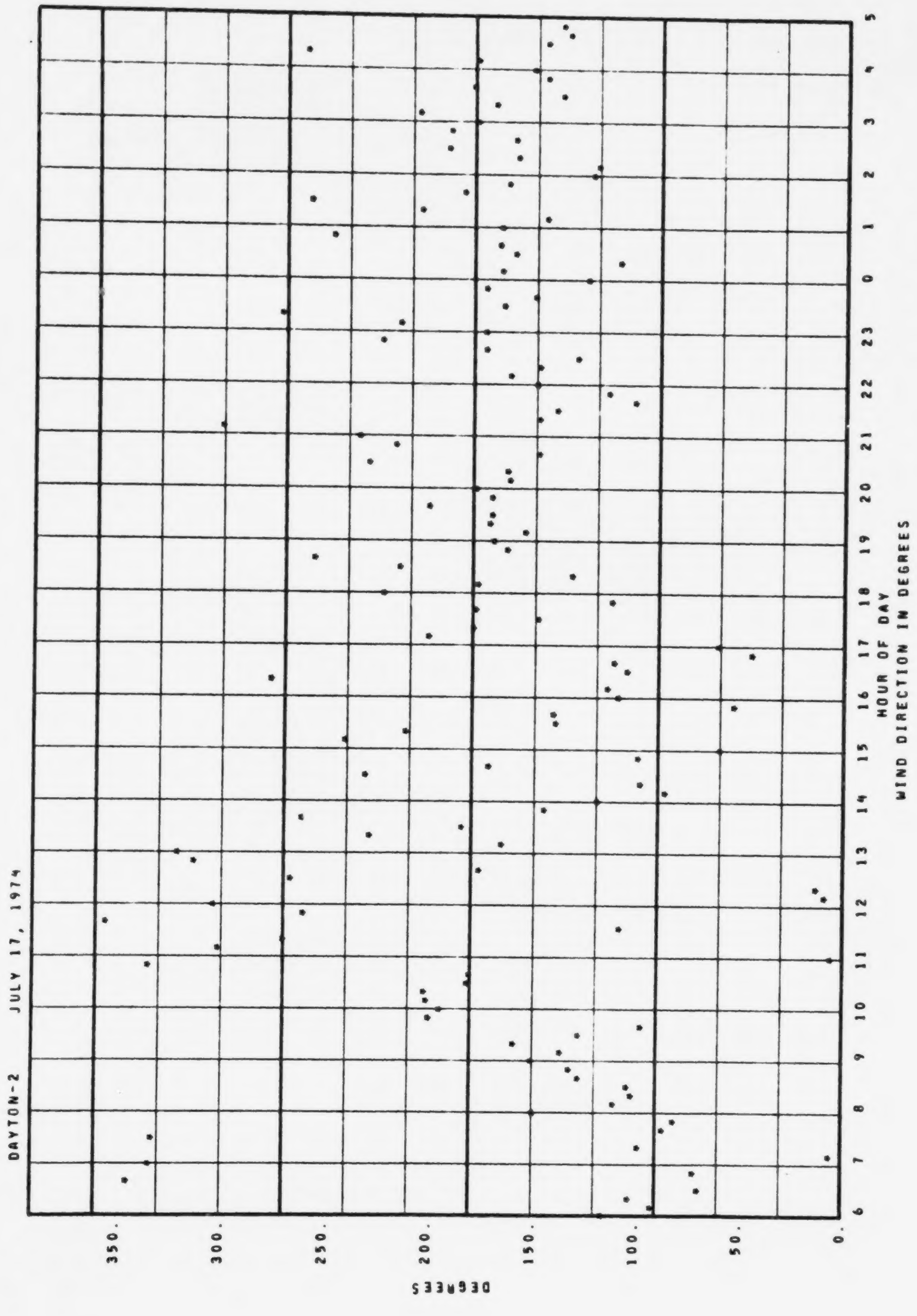


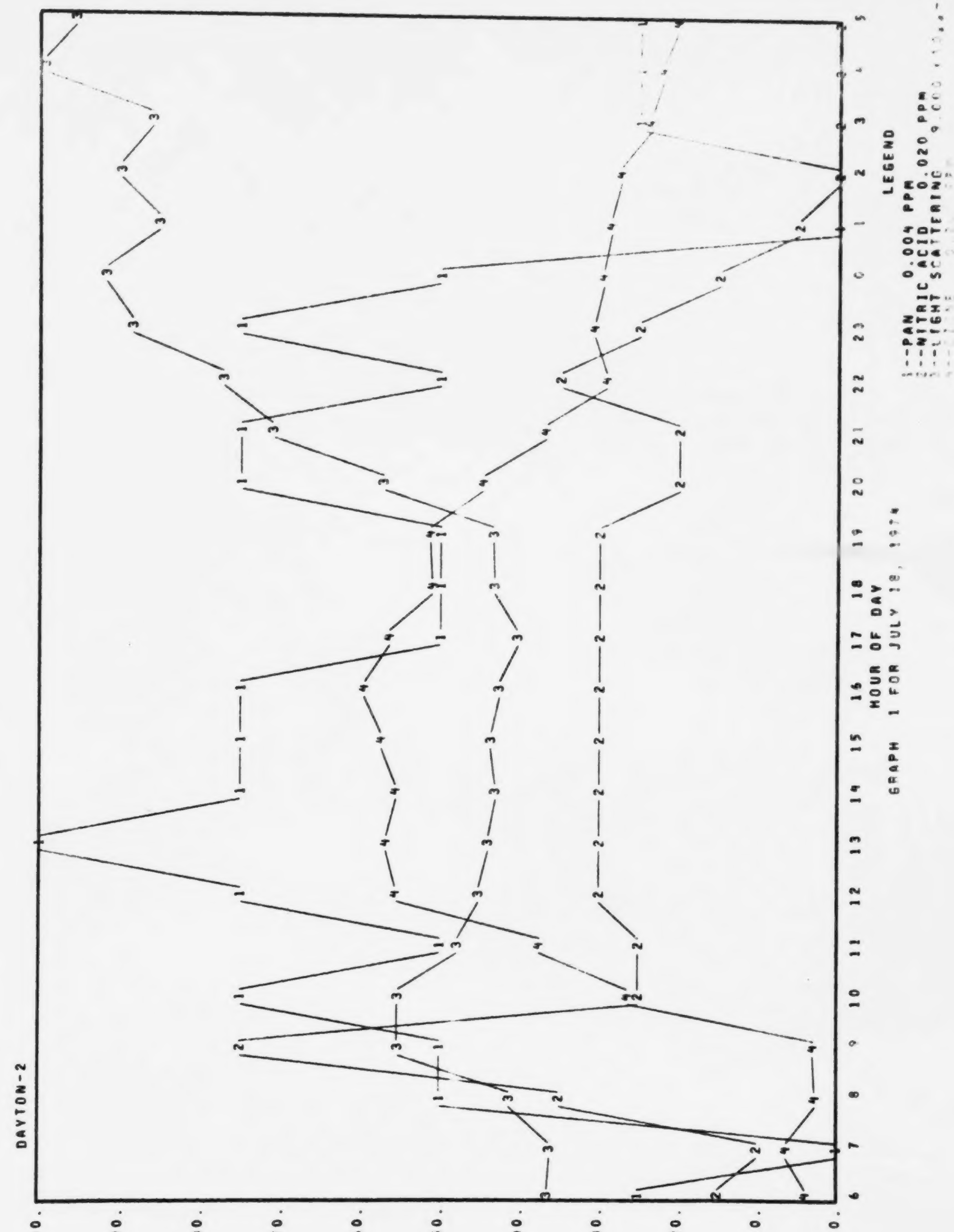
GRAPH 3 FOR JULY 17, 1974


DAYTON-2
PERCENT OF UNITS
100. 90. 80. 70. 60. 50. 40. 30. 20. 10. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 4 FOR JULY 17, 1974
LEGEND
1--AMMONIA 0.008 PPM
2--SULFUR DIOXIDE 0.070 PPM
3--CARBON MONOXIDE 3.000 PPM
4--METHANE 3.000 PPMC

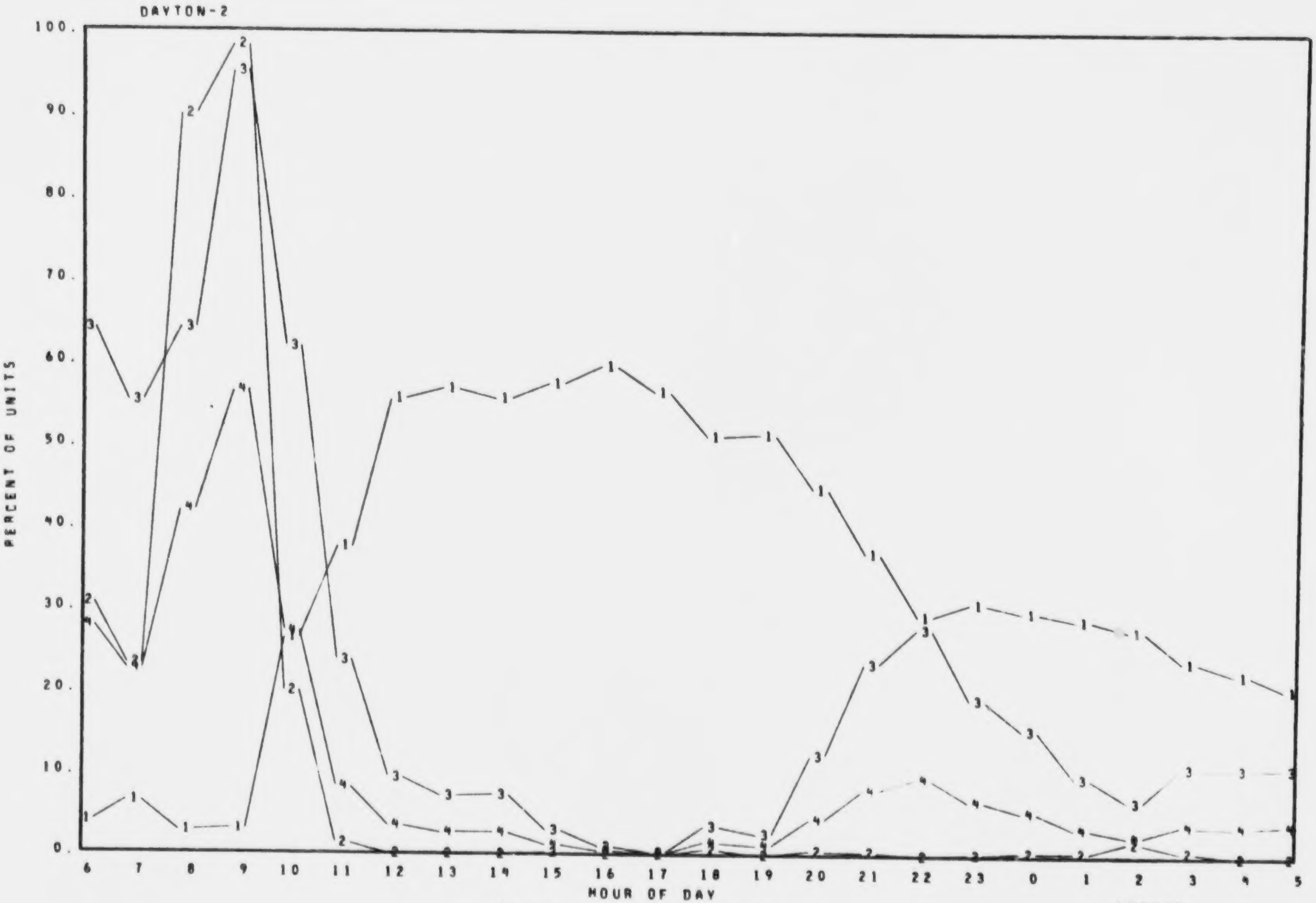


GRAPH 5 FOR JULY 17, 1974


DAYTON-2 JULY 17, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5

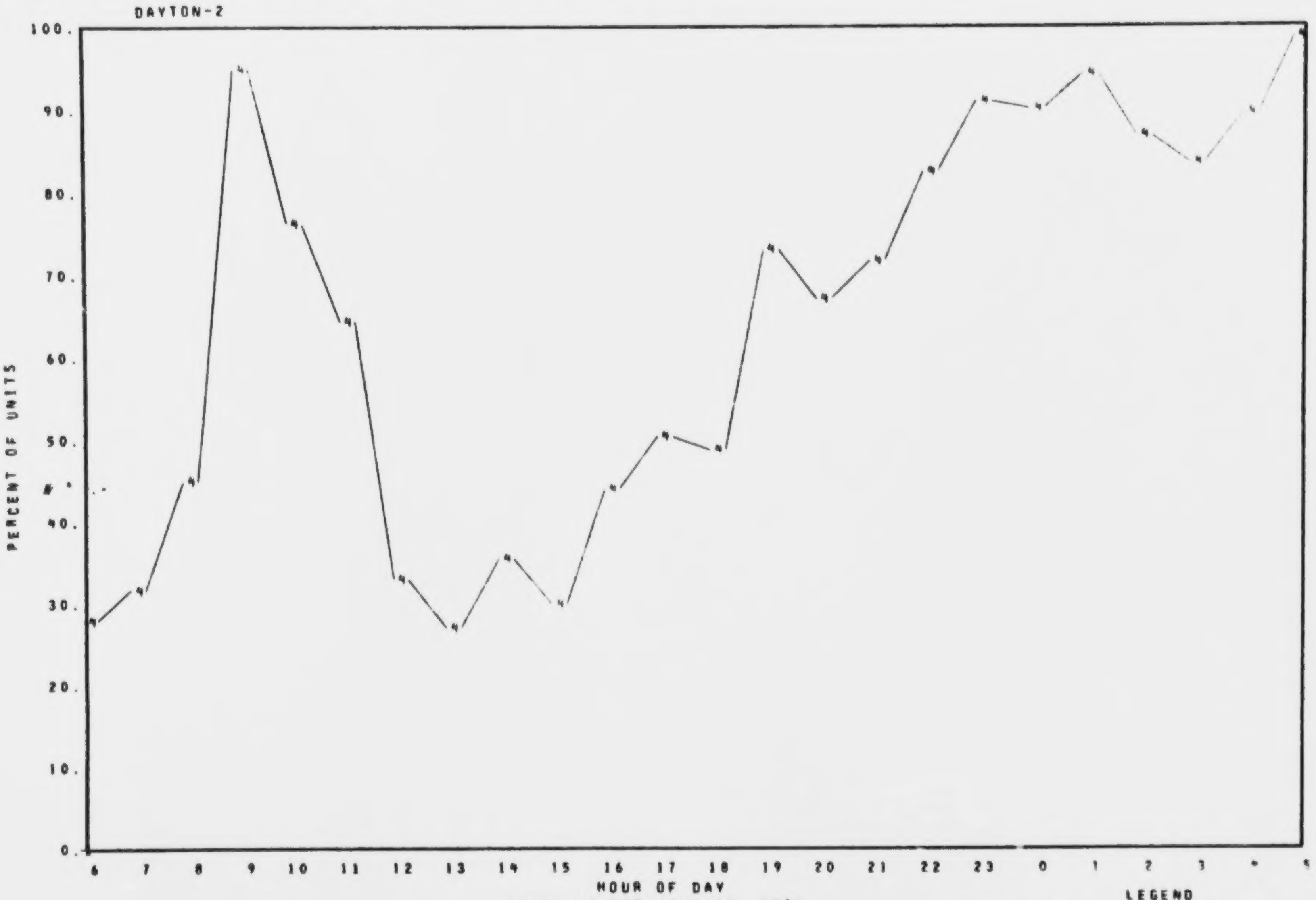


GRAPH 1 FOR JULY 18, 1974



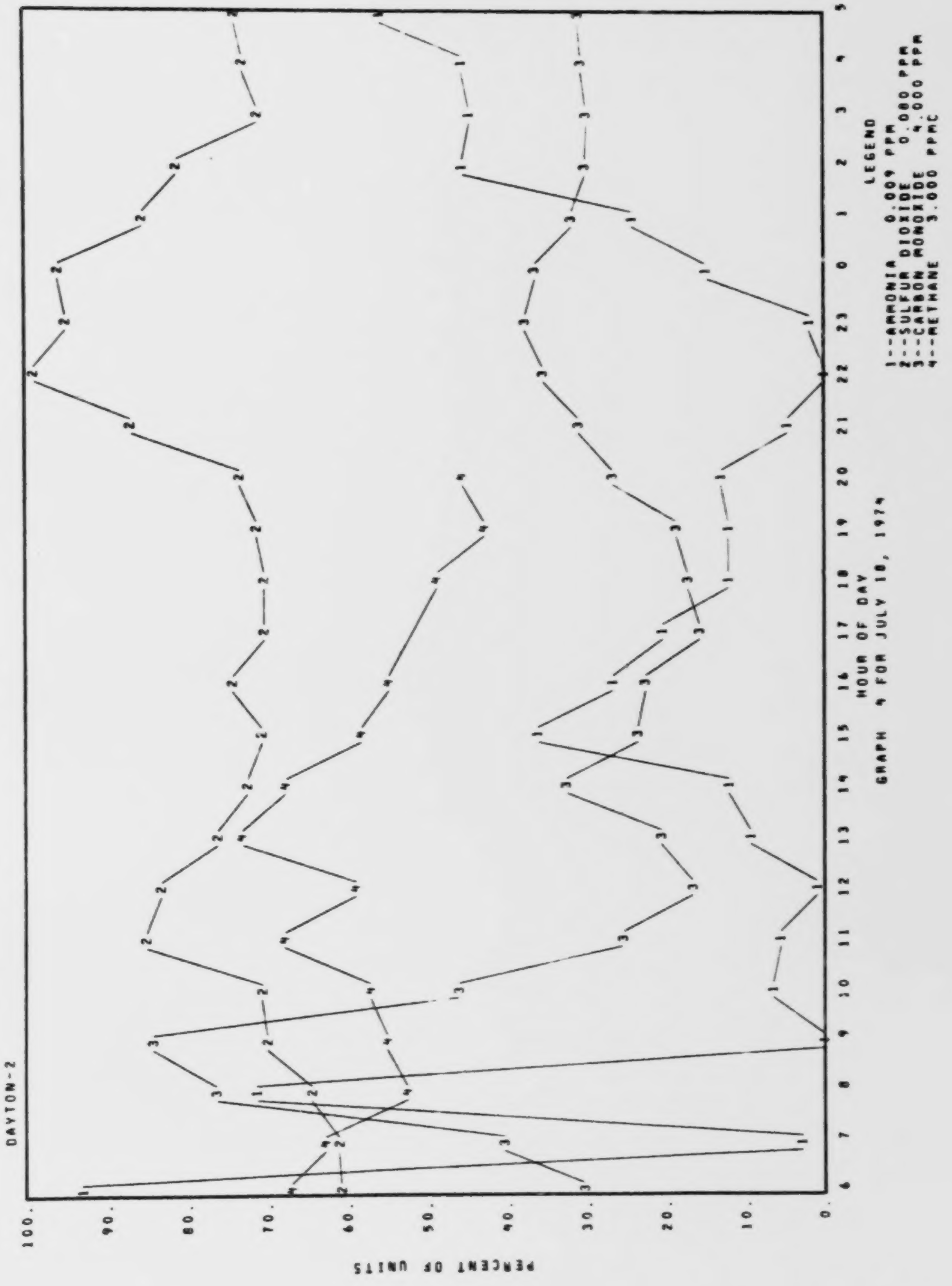
GRAPH 2 FOR JULY 18, 1974

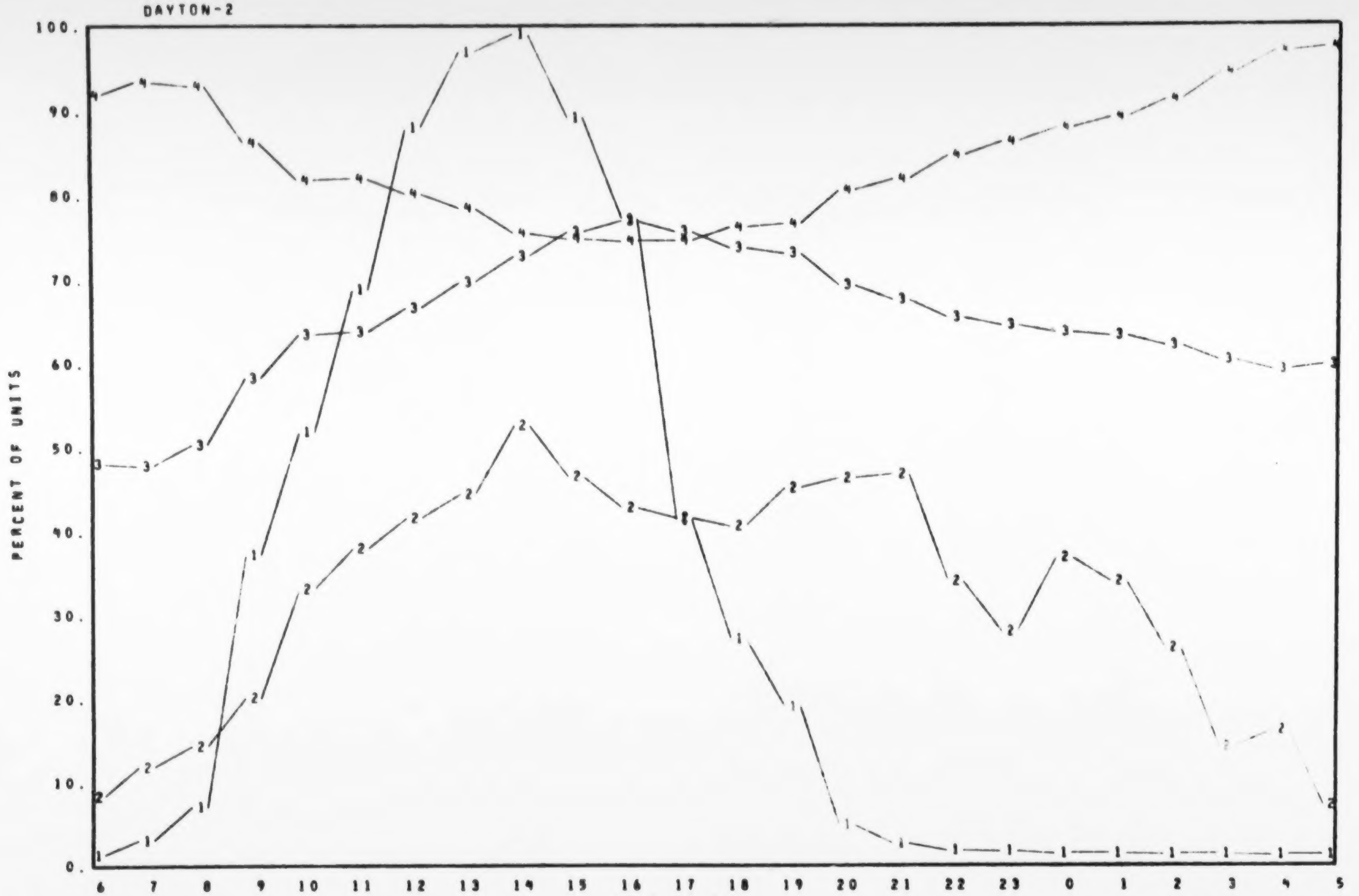
LEGEND
1--OZONE 0.200 PPM
2--NITRIC OXIDE 0.040 PPM
3--NITROGEN DIOXIDE 0.060 PPM
4--NITROGEN OXIDES 0.200 PPM



GRAPH 3 FOR JULY 18, 1974

LEGEND
4--NON-METHANE HYDROCARBON 0.8CC PPMC

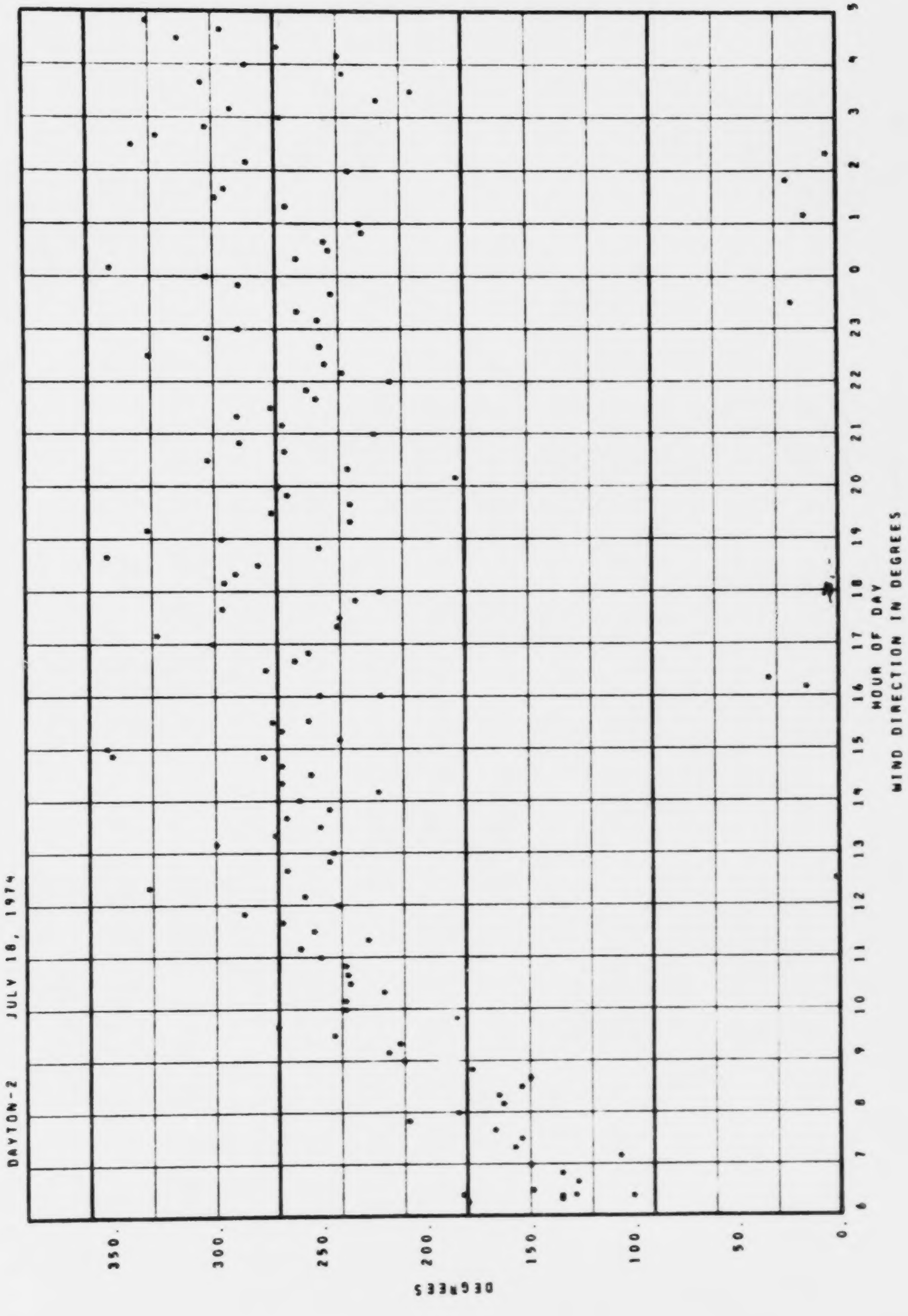

DAYTON-2
PERCENT OF UNITS
HOUR OF DAY
GRAPH 4 FOR JULY 10, 1974
LEGEND
1--AMMONIA 0.009 PPM
2--SULFUR DIOXIDE 0.000 PPM
3--CARBON MONOXIDE 4.000 PPM
4--METHANE 3.000 PPMC

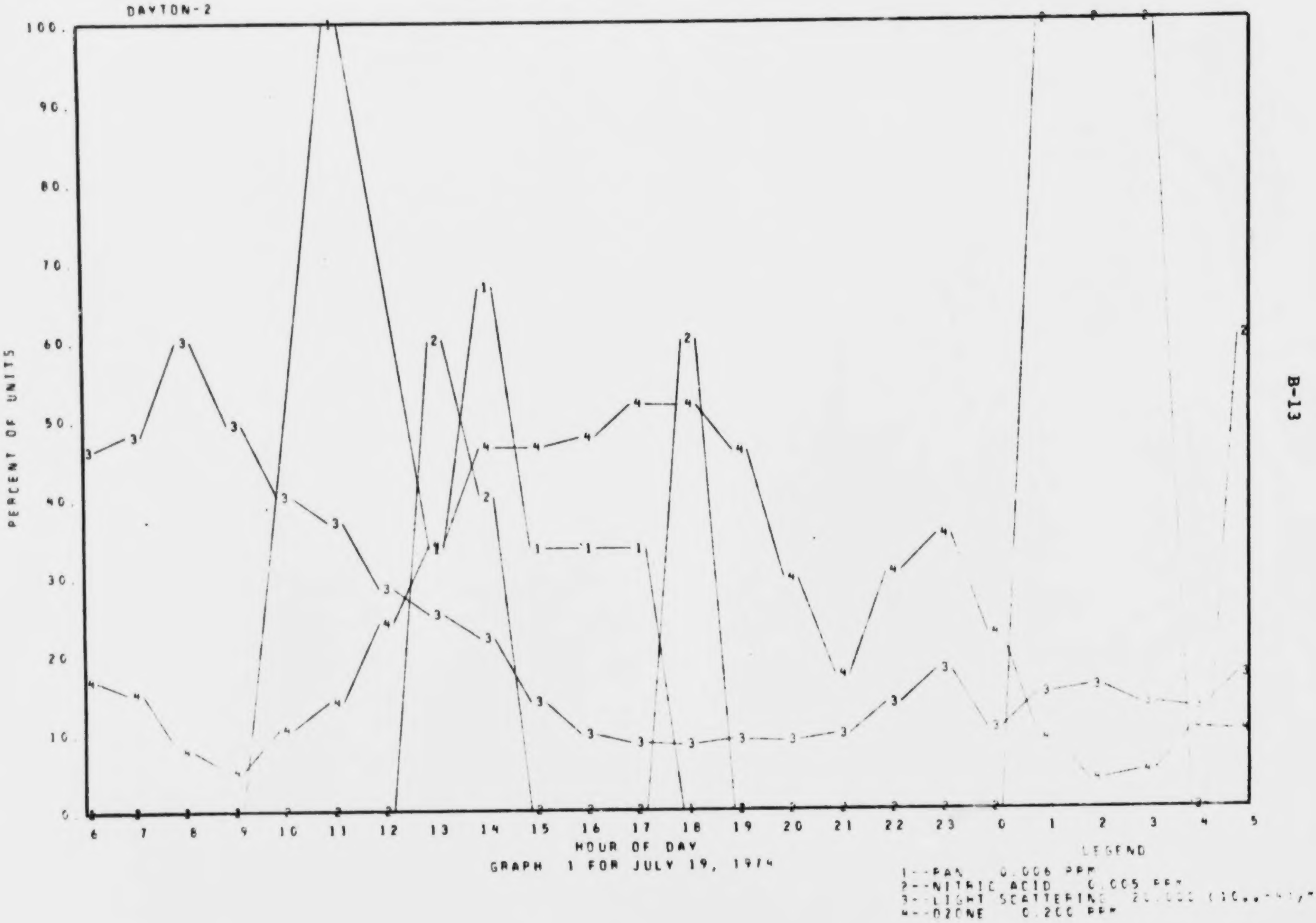


GRAPH 5 FOR JULY 18, 1974

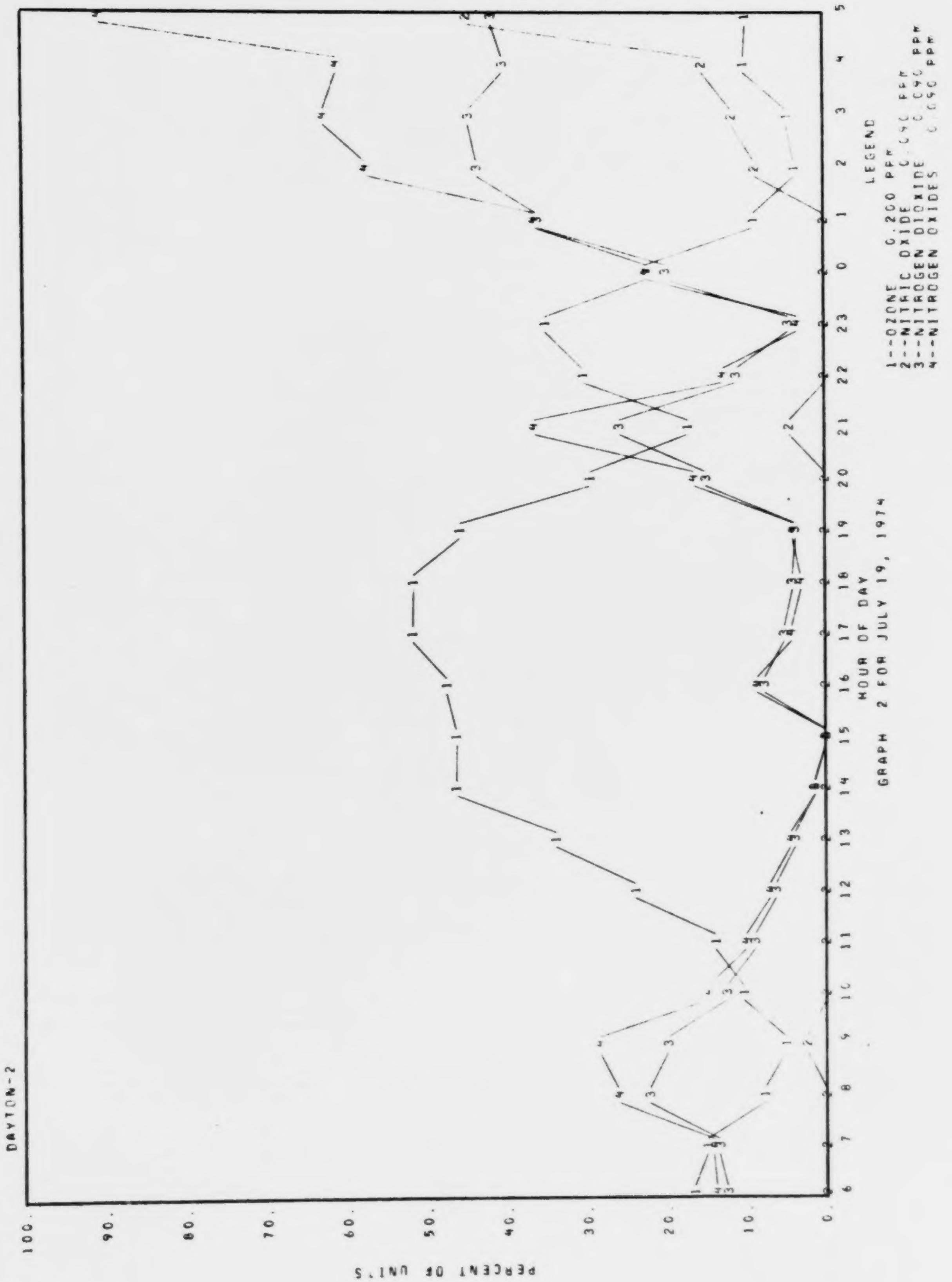
LEGEND

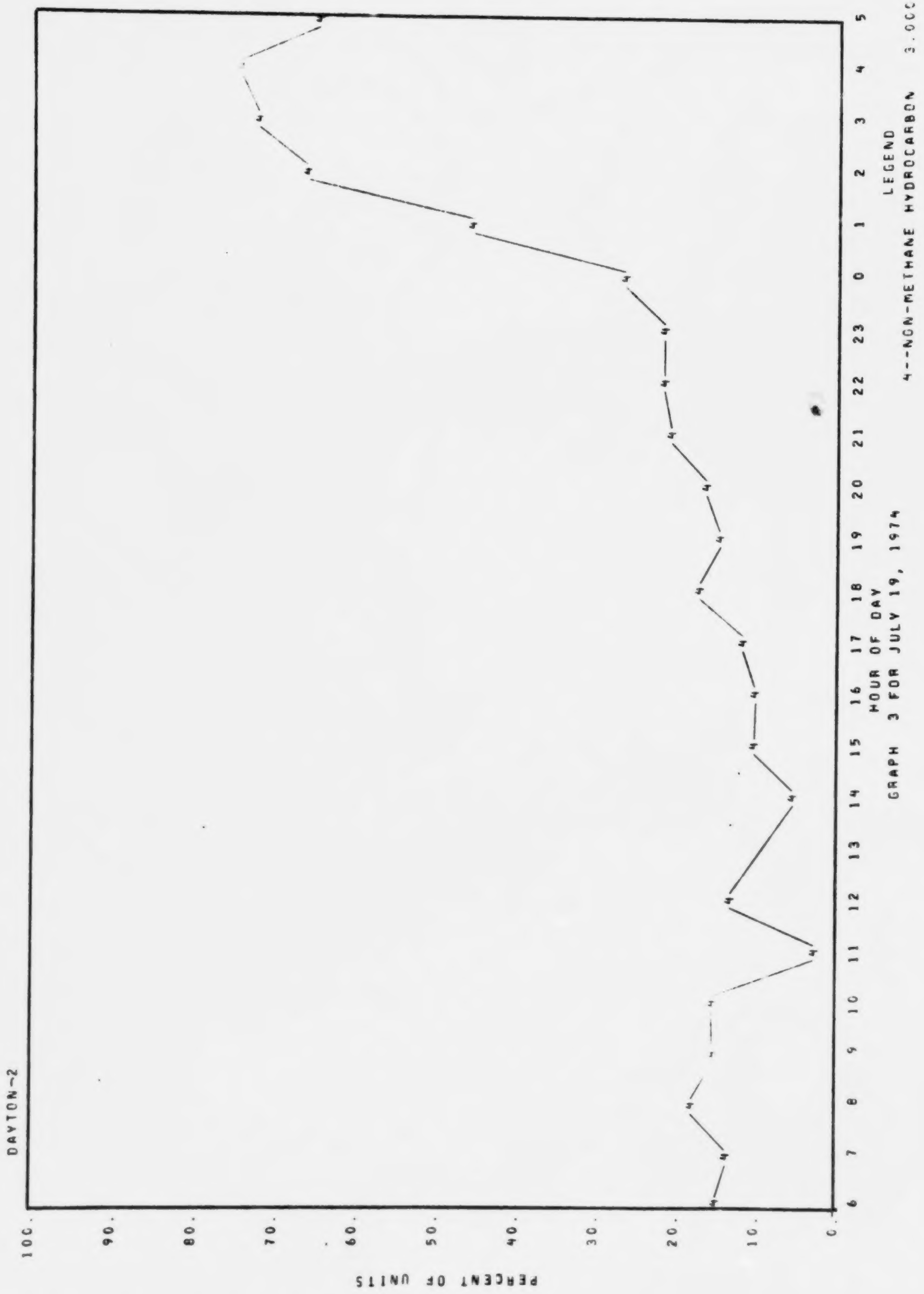
1--GLOBAL IRRADIANCE 1.000 CAL,SQ CM/MIN
2--WIND SPEED 20.000 MPH
3--TEMPERATURE 40.000 CENTIGRADE
4--RELATIVE HUMIDITY [illegible] PERCENT

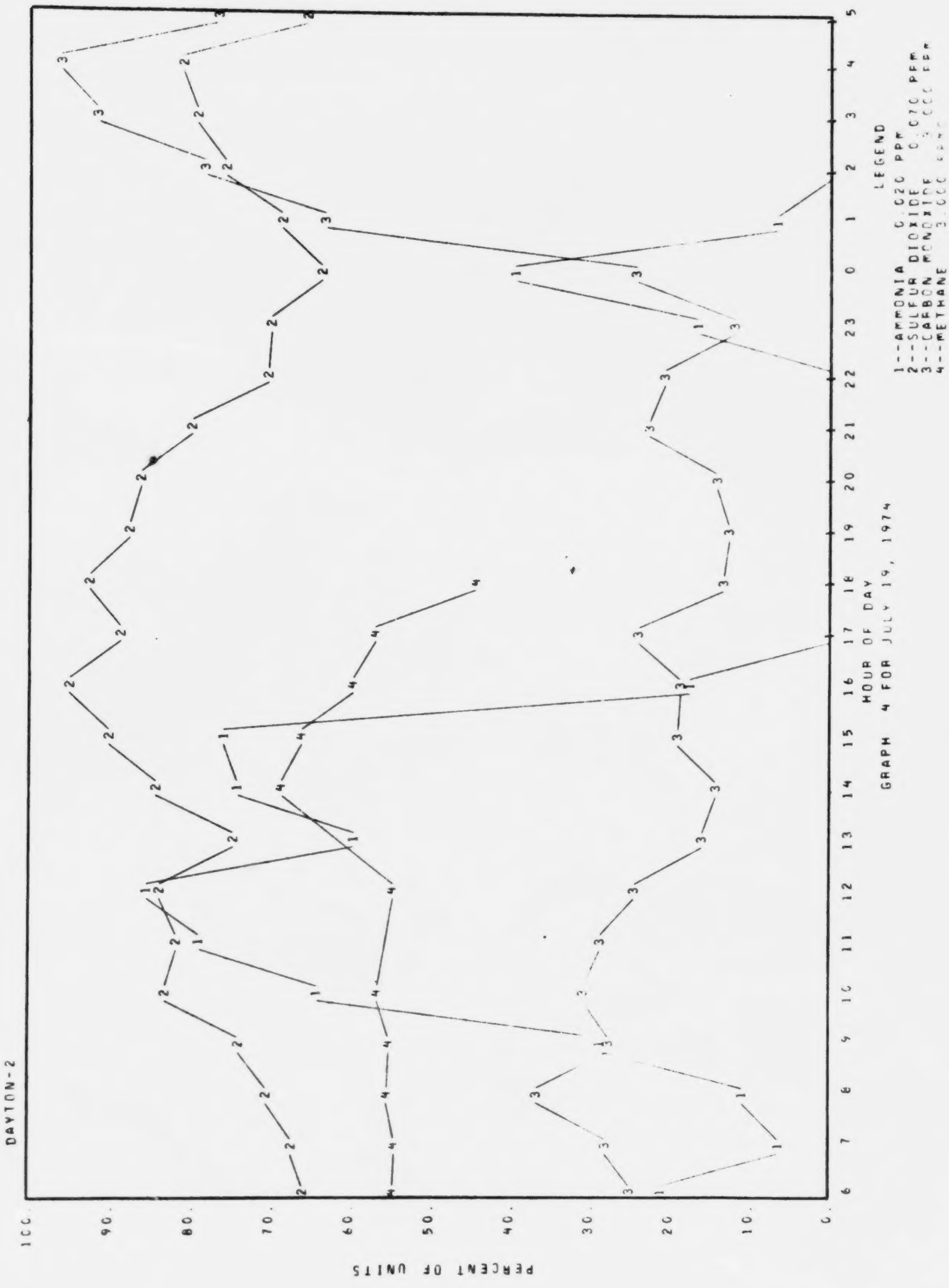

DAYTON-2
JULY 18, 1974
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5
HOUR OF DAY
WIND DIRECTION IN DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
DEGREES

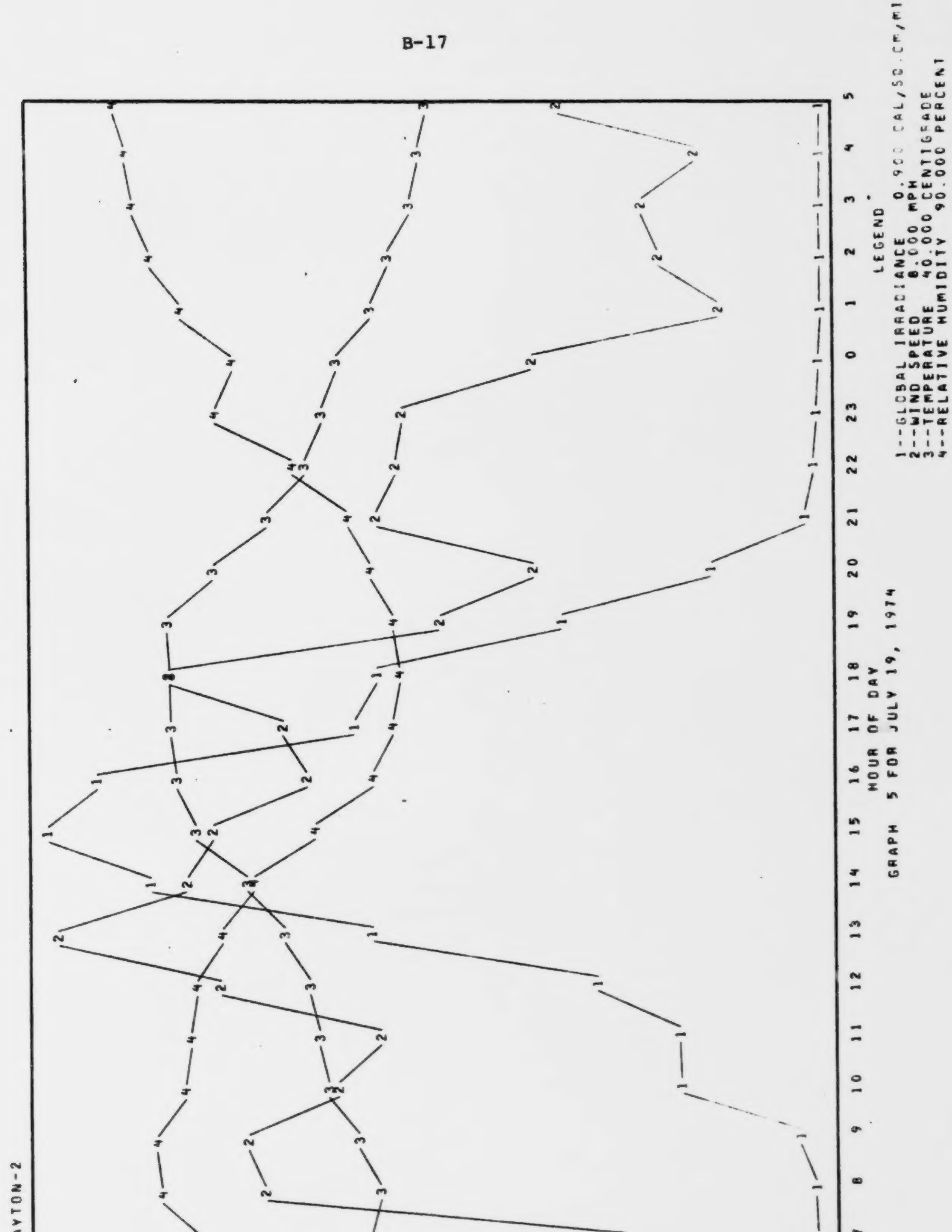


GRAPH 1 FOR JULY 19, 1974

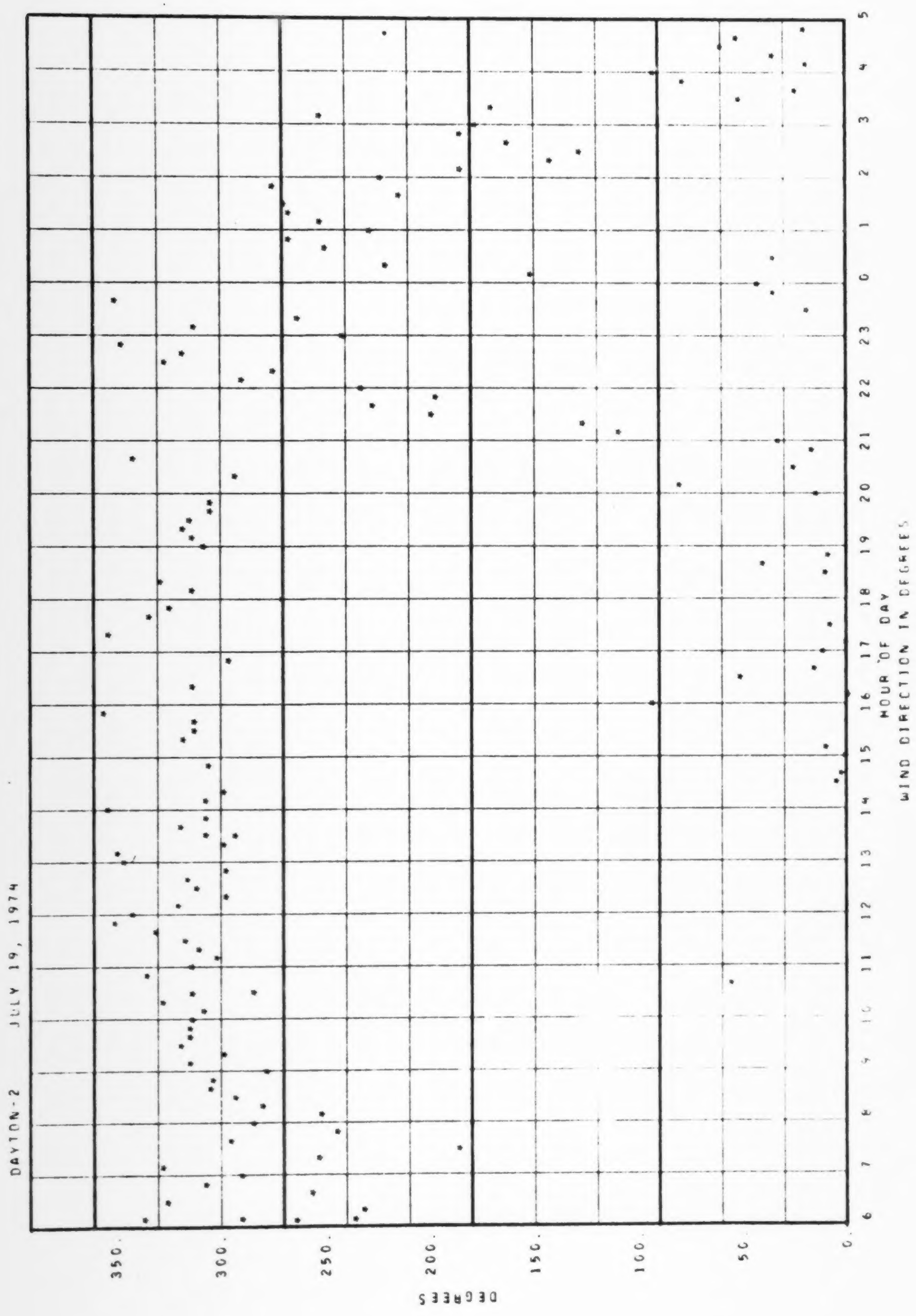

DAYTON-2
PERCENT OF UNITS
0.
10.
20.
30.
40.
50.
60.
70.
80.
90.
100.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5
HOUR OF DAY
GRAPH 2 FOR JULY 19, 1974
LEGEND
1--OZONE 0.200 PPM
2--NITRIC OXIDE 0.090 PPM
3--NITROGEN DIOXIDE 0.090 PPM
4--NITROGEN OXIDES 0.090 PPM

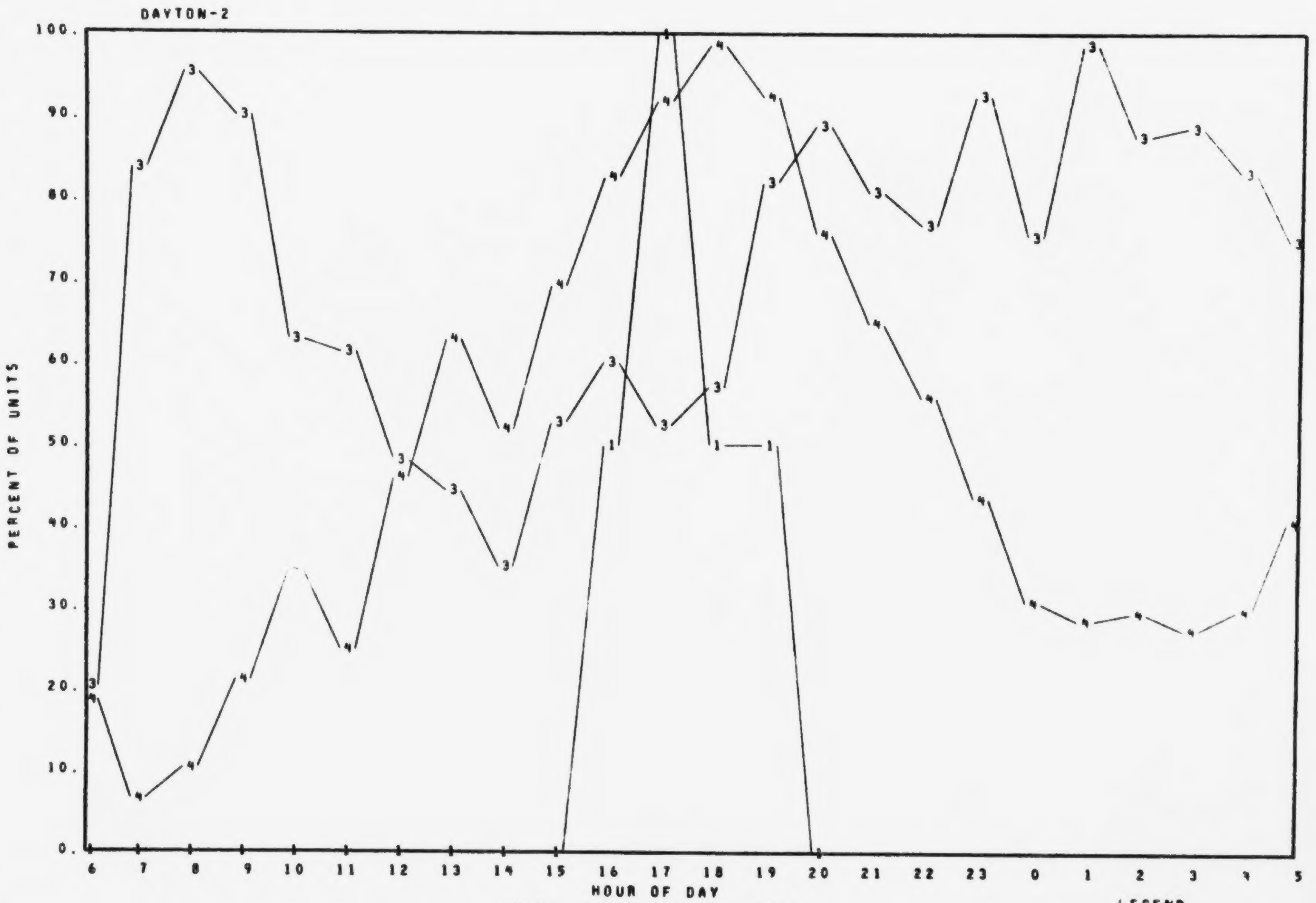

DAYTON-2
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 3 FOR JULY 19, 1974
LEGEND
4--NON-METHANE HYDROCARBON


DAYTON-2
PERCENT OF UNITS
HOUR OF DAY
GRAPH 4 FOR JULY 19, 1974
LEGEND
1--AMMONIA 0.020 PPM
2--SULFUR DIOXIDE 0.070 PPM
3--CARBON MONOXIDE
4--METHANE 3.000



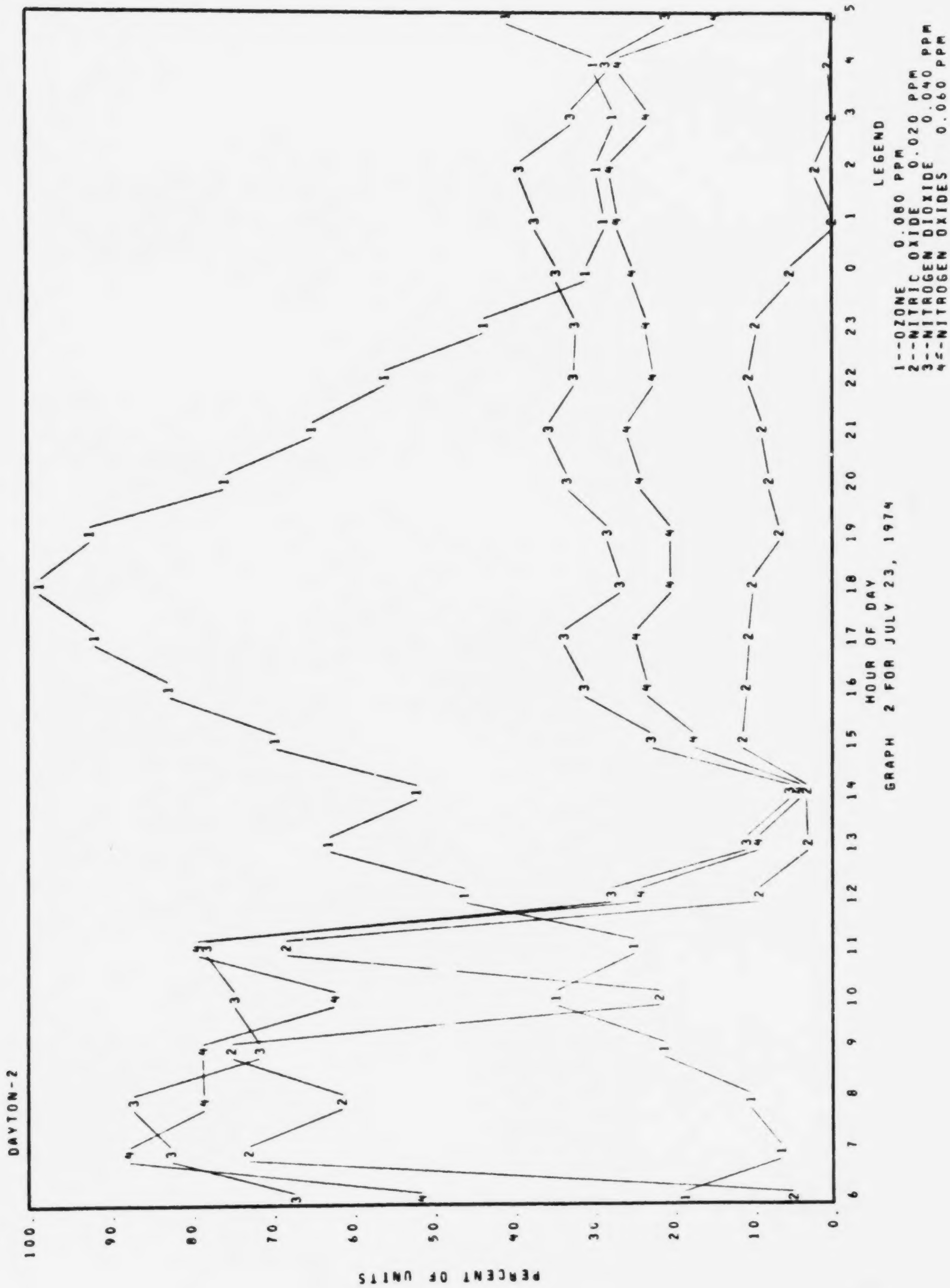
GRAPH 5 FOR JULY 19, 1974

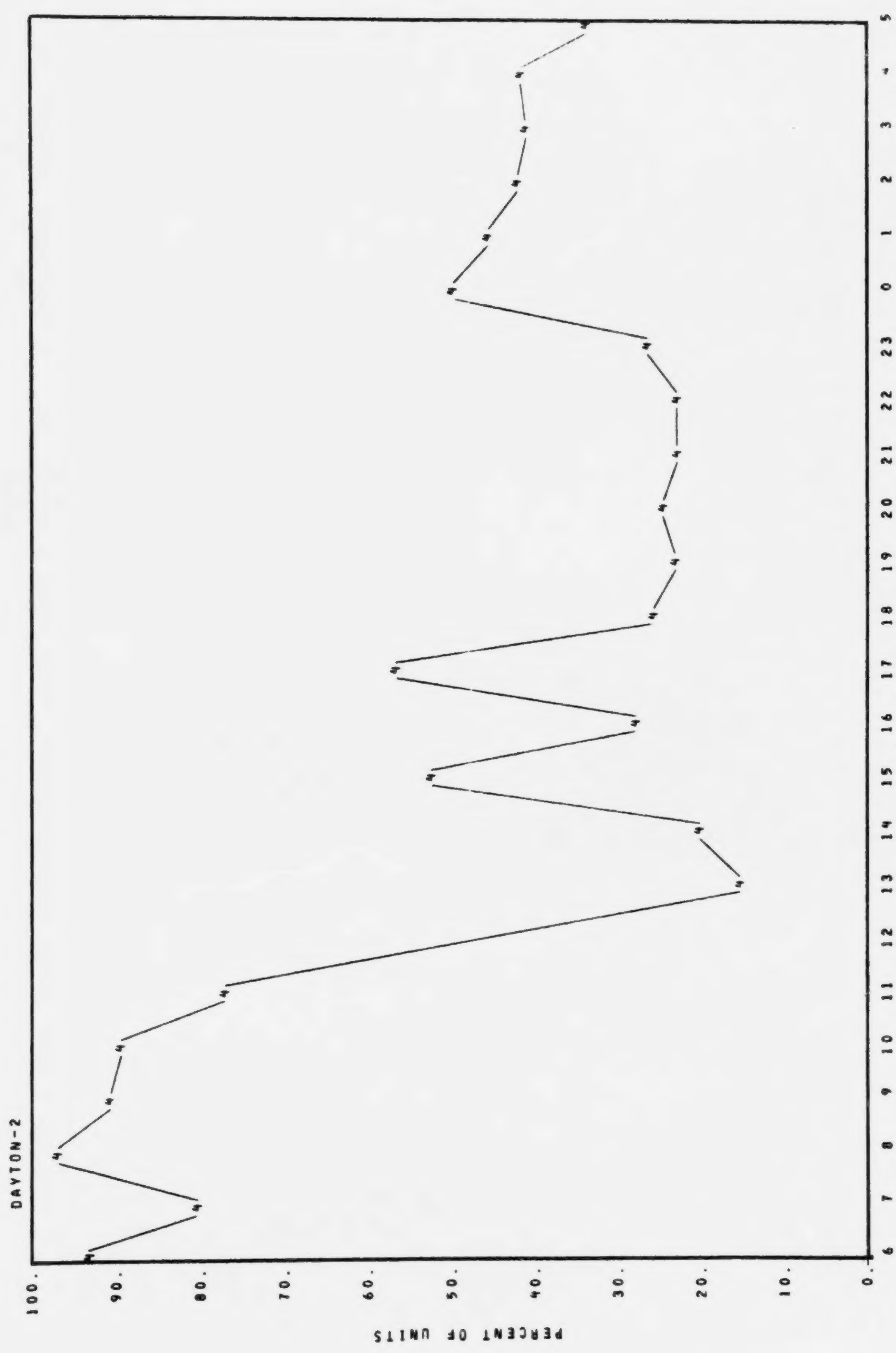

DAYTON-2 JULY 19, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5



GRAPH 1 FOR JULY 23, 1974

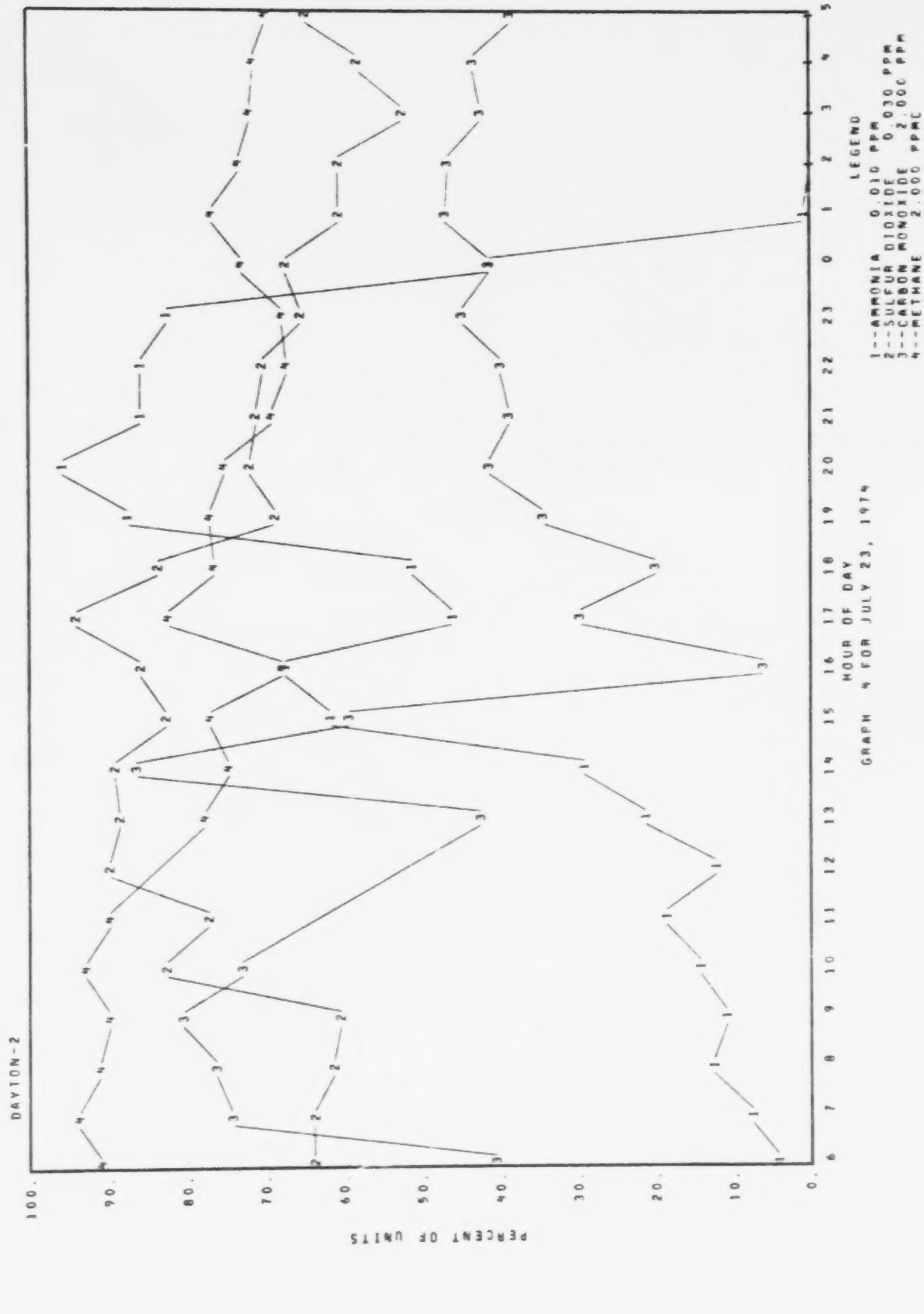
LEGEND
1--PAN 0.002 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 10.000 (10**-4)/M
4--OZONE 0.080 PPM

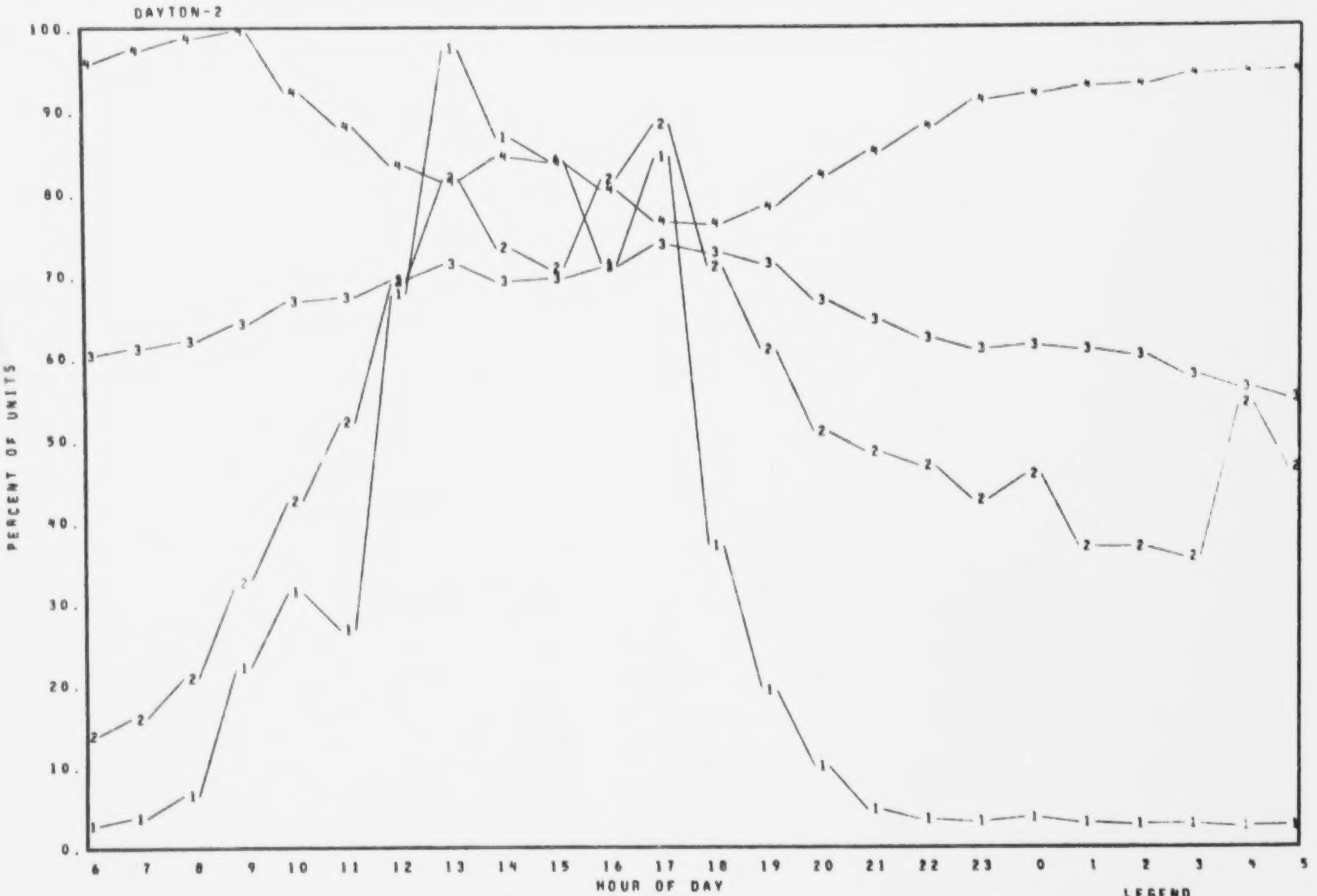

DAYTON-2
PERCENT OF UNITS
HOUR OF DAY
GRAPH 2 FOR JULY 23, 1974
LEGEND
1--OZONE 0.080 PPM
2--NITRIC OXIDE 0.020 PPM
3--NITROGEN DIOXIDE 0.040 PPM
4--NITROGEN OXIDES 0.060 PPM



GRAPH 3 FOR JULY 23, 1974

LEGEND
4--NON-METHANE HYDROCARBON 0.800 PPMC

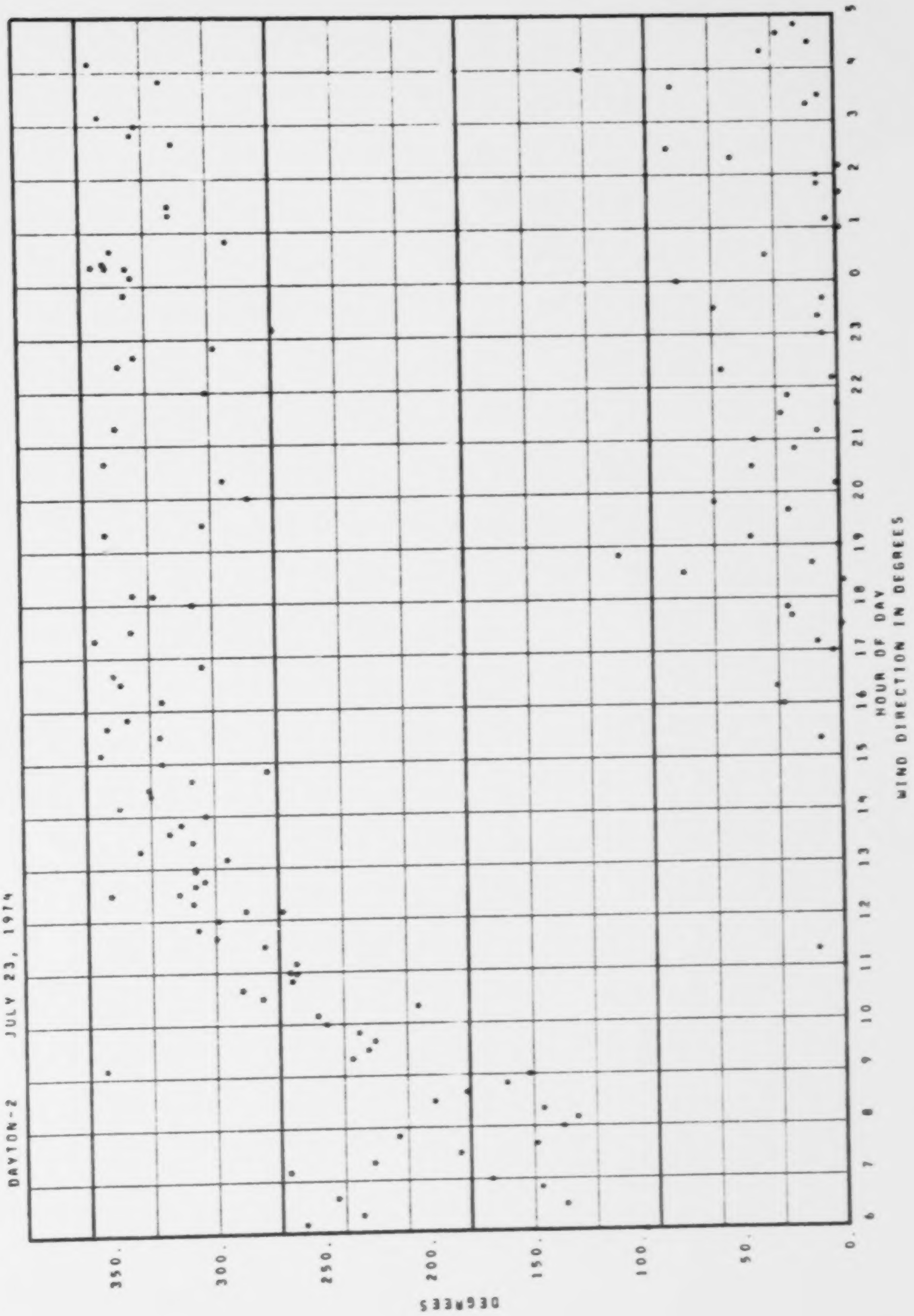

DAYTON-2
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 4 FOR JULY 23, 1974
LEGEND
1--AMMONIA 0.010 PPM
2--SULFUR DIOXIDE 0.030 PPM
3--CARBON MONOXIDE 2.000 PPM
4--METHANE 2.000 PPMC

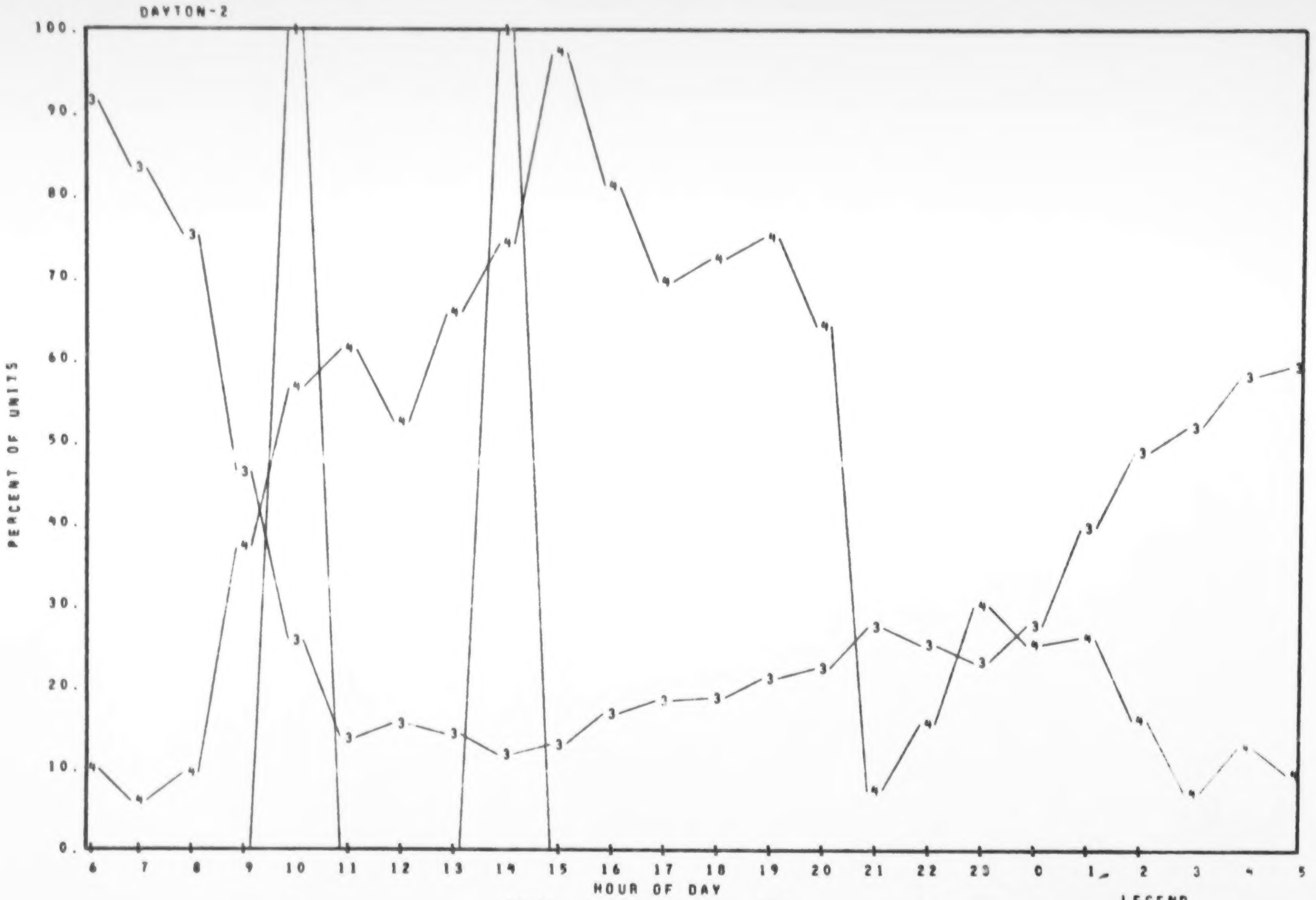


GRAPH 5 FOR JULY 23, 1974

LEGEND

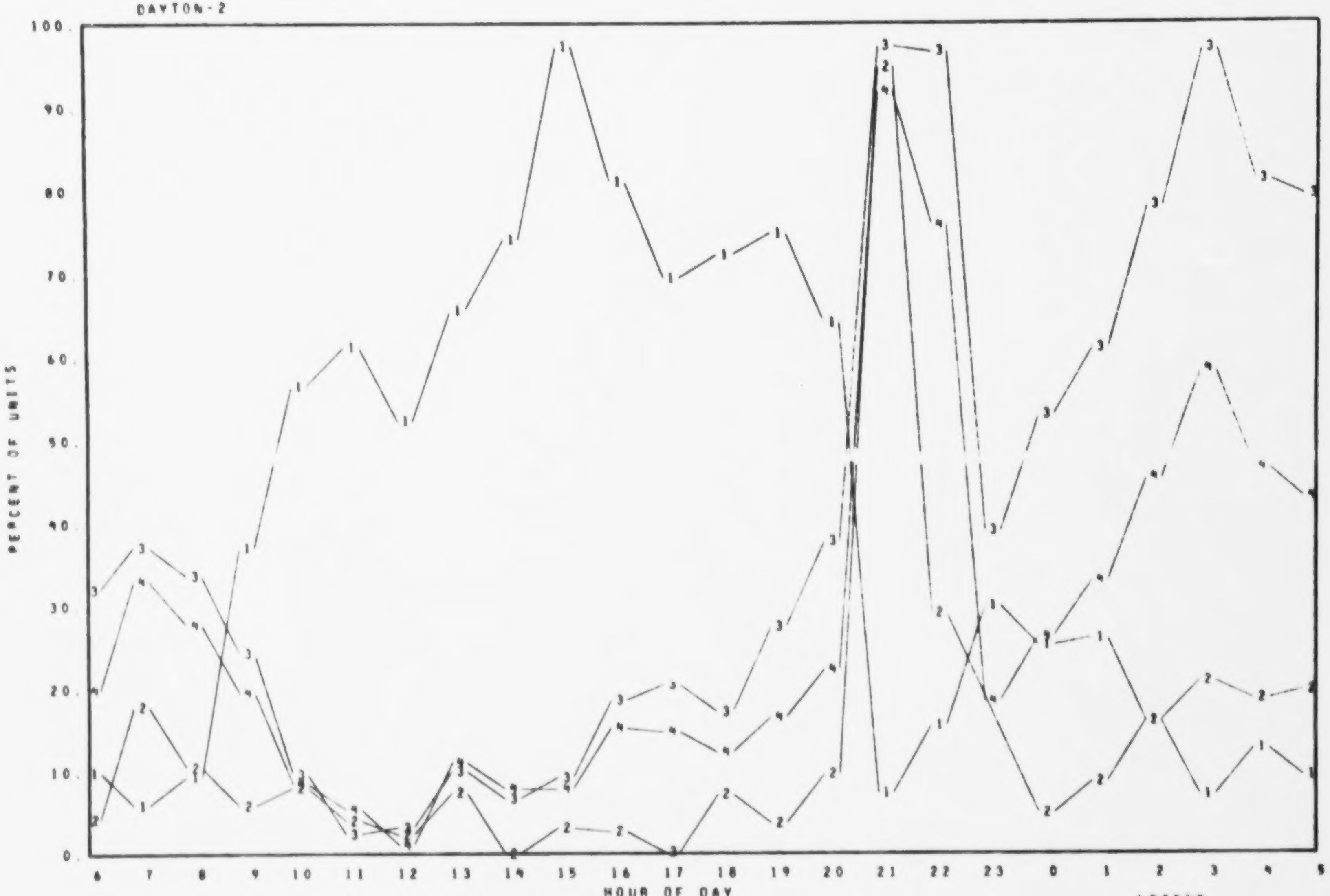
1--GLOBAL IRRADIANCE 0.500 CAL/SQ.CM/MIN
2--WIND SPEED 8.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE HUMIDITY 100.000 PERCENT


DAYTON-2
JULY 23, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
0. 50. 100. 150. 200. 250. 300. 350.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5



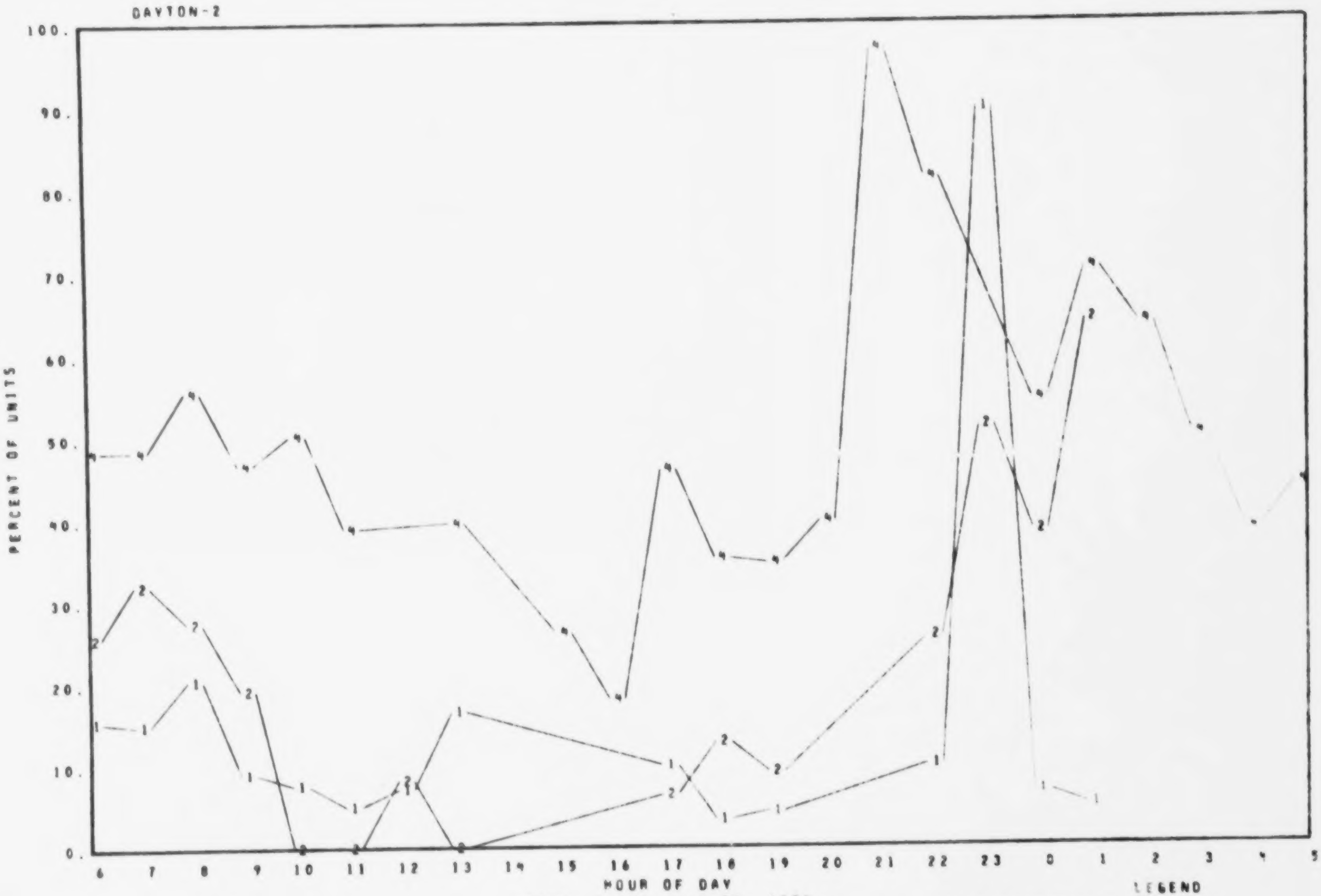
GRAPH 1 FOR JULY 24, 1974

LEGEND
1--PAN 0.001 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 9.000 (10**-4)/M
4--OZONE 0.100 PPM



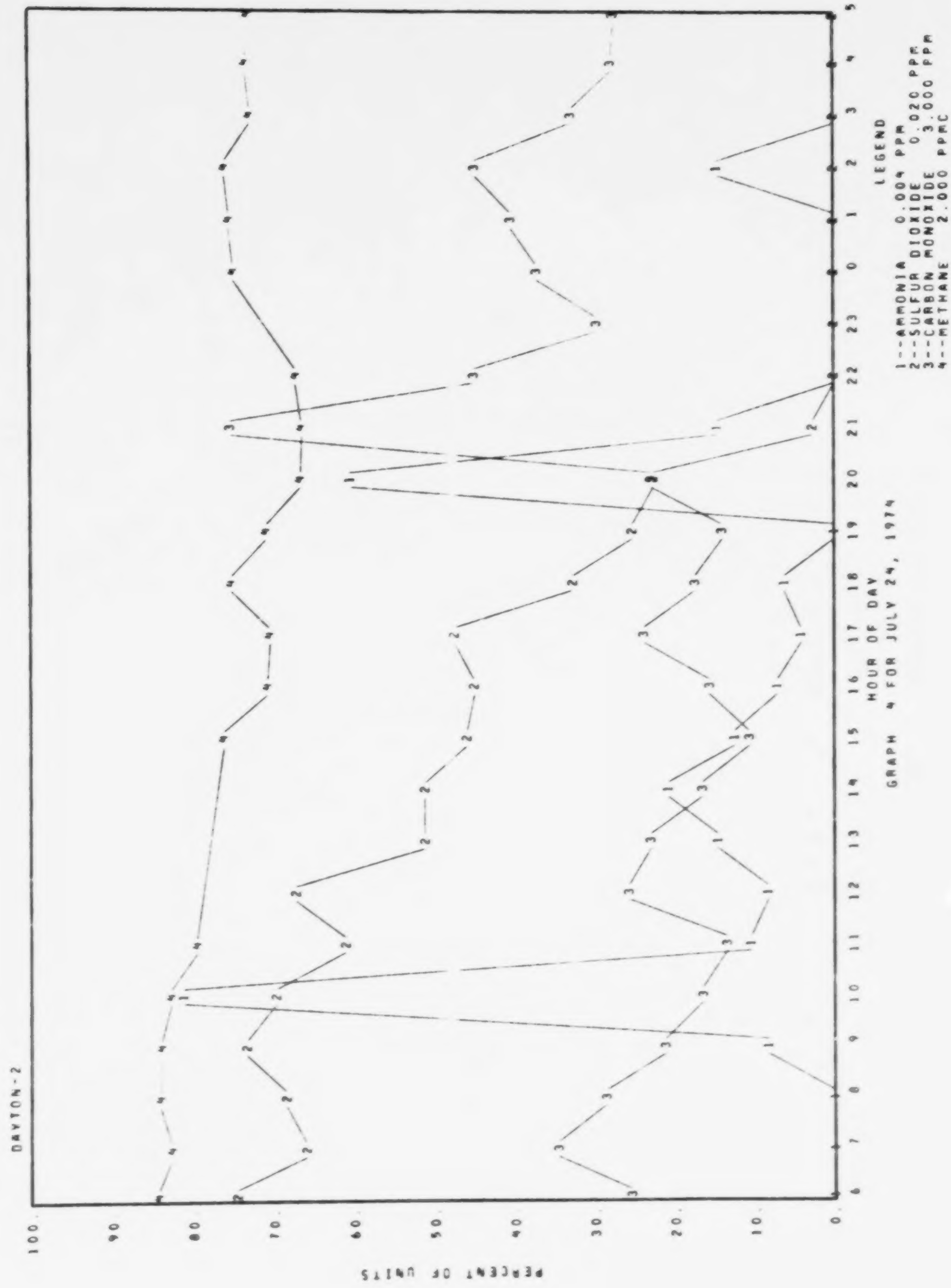
GRAPH 2 FOR JULY 24, 1974

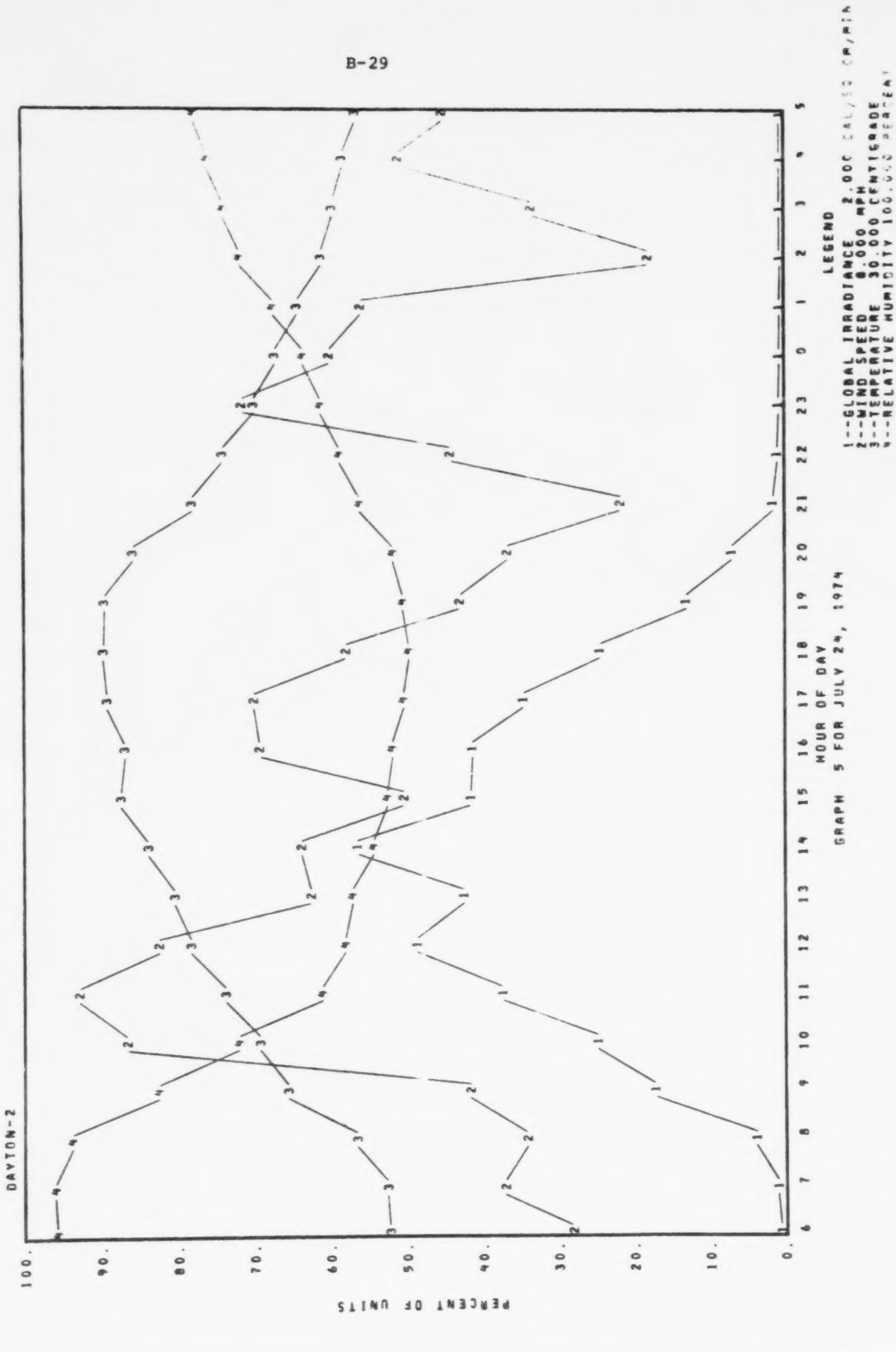
LEGEND
1--OZONE 0.100 PPM
2--NITRIC OXIDE 0.050 PPM
3--NITROGEN DIOXIDE 0.050 PPM
4--NITROGEN OXIDES 0.100 PPM



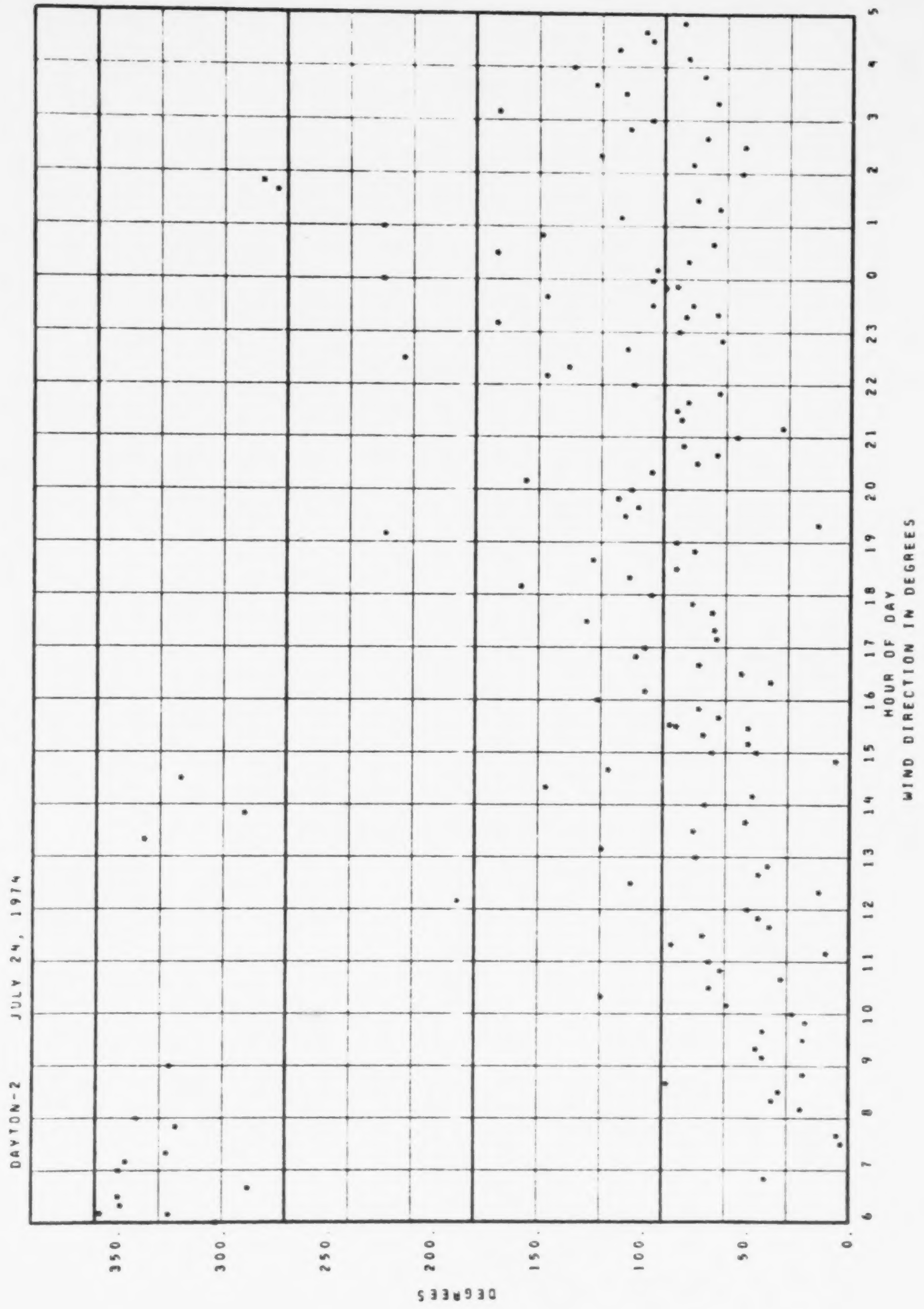
GRAPH 3 FOR JULY 24, 1974

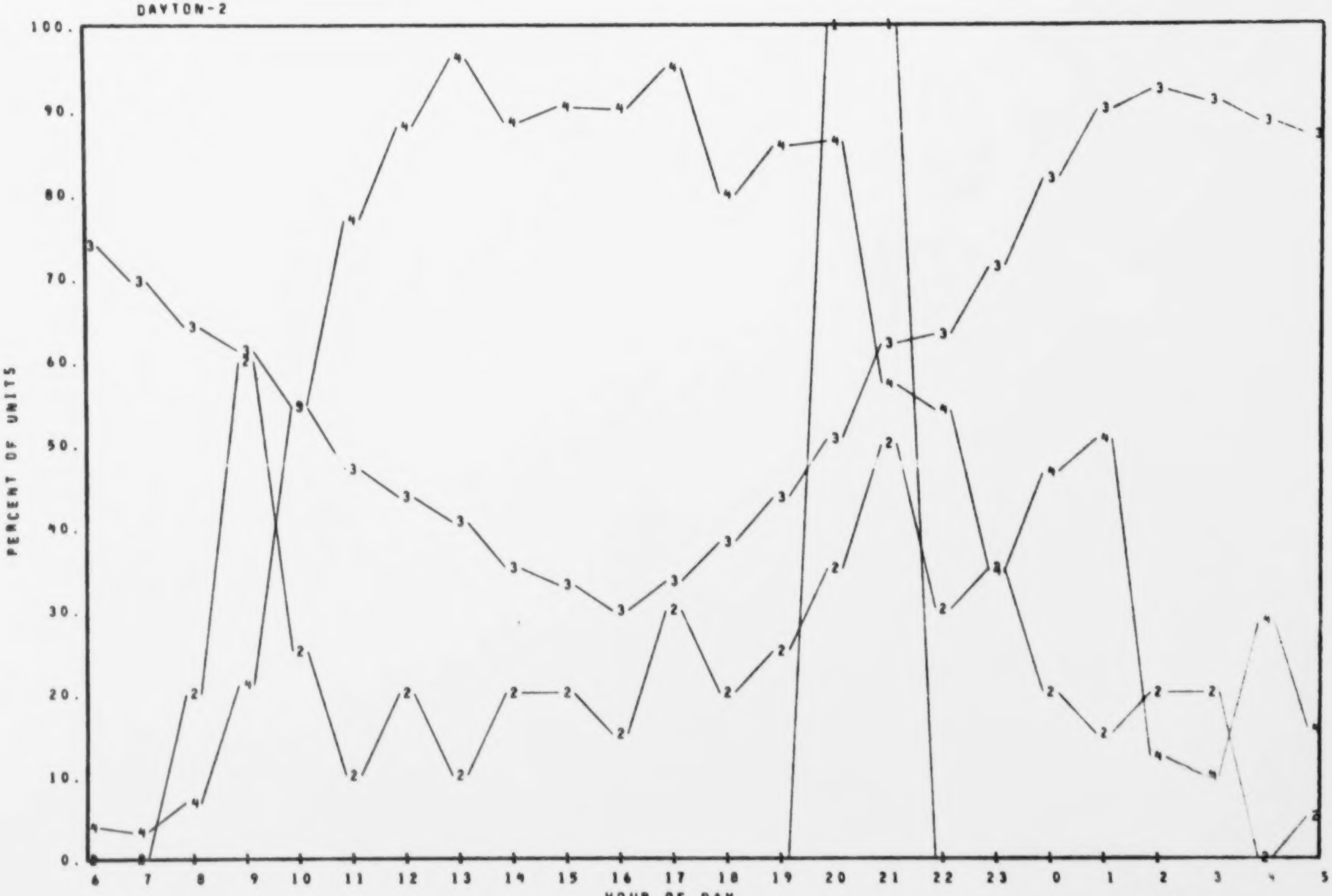
LEGEND
1--ETHYLENE 0.080 PPMC
2--ACETYLENE 0.020 PPMC
4--NON-METHANE HYDROCARBON 0.600 PPMC


DAYTON-2
PERCENT OF UNITS
HOUR OF DAY
GRAPH 4 FOR JULY 24, 1974
LEGEND
1--AMMONIA 0.004 PPM
2--SULFUR DIOXIDE 0.020 PPM
3--CARBON MONOXIDE 3.000 PPM
4--METHANE 2.000 PPMC



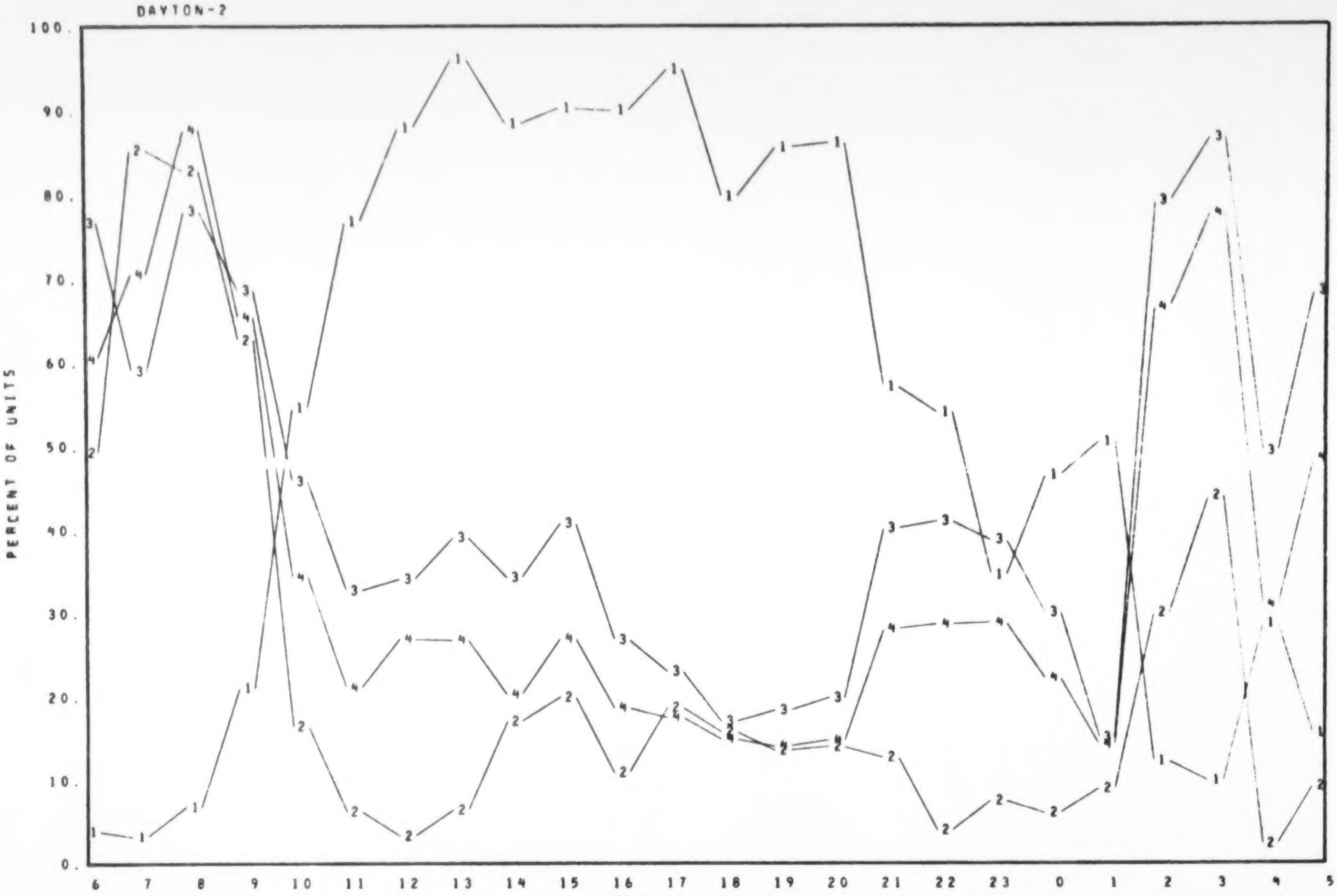
GRAPH 5 FOR JULY 24, 1974


DAYTON-2 JULY 24, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350. 300. 250. 200. 150. 100. 50. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5



GRAPH 1 FOR JULY 25, 1974

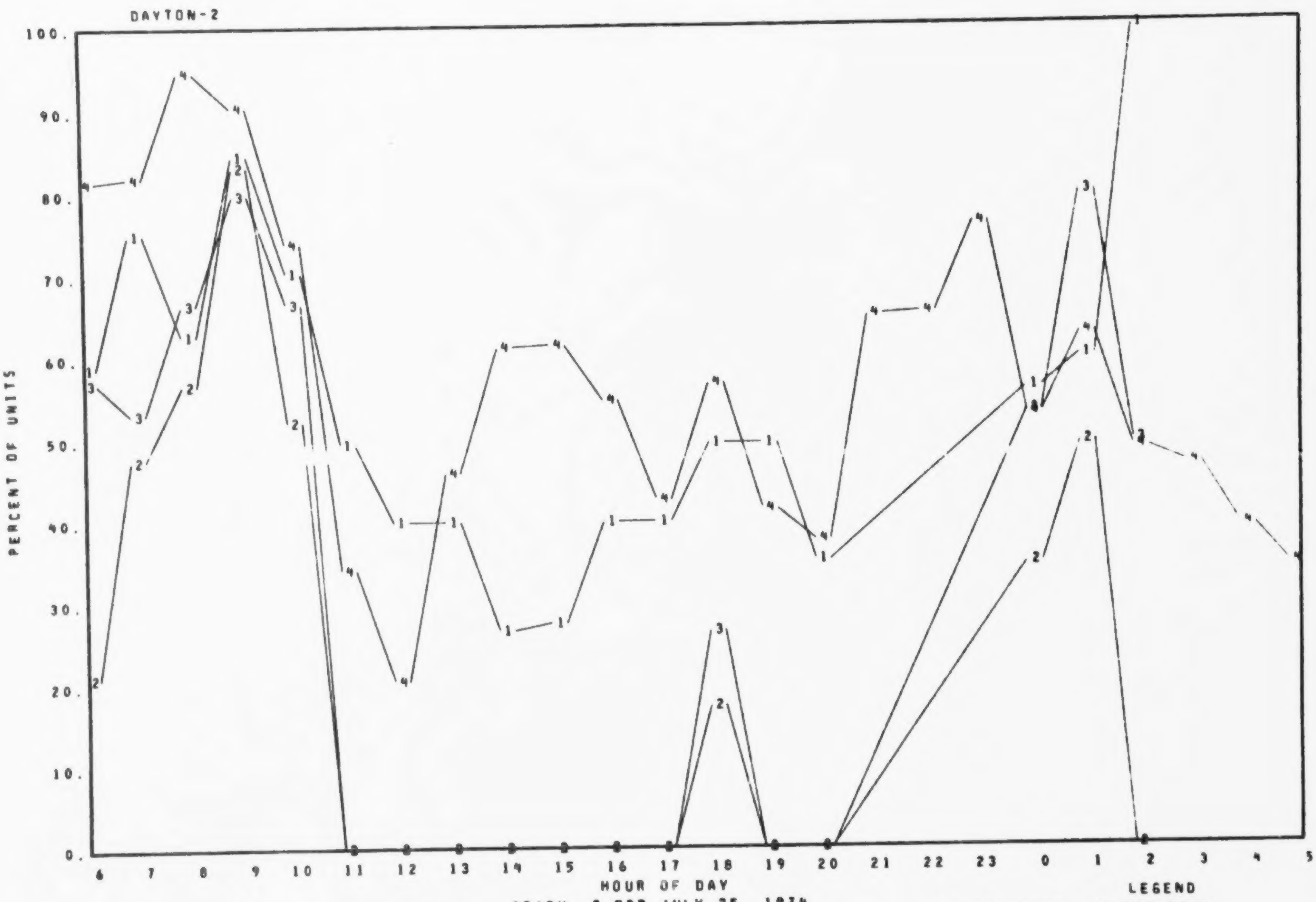
LEGEND
1--PAN 0.001 PPM
2--NITRIC ACID 0.020 PPM
3--LIGHT SCATTERING 8.000 (10**-4)/M
4--OZONE 0.100 PPM



GRAPH 2 FOR JULY 25, 1974

LEGEND

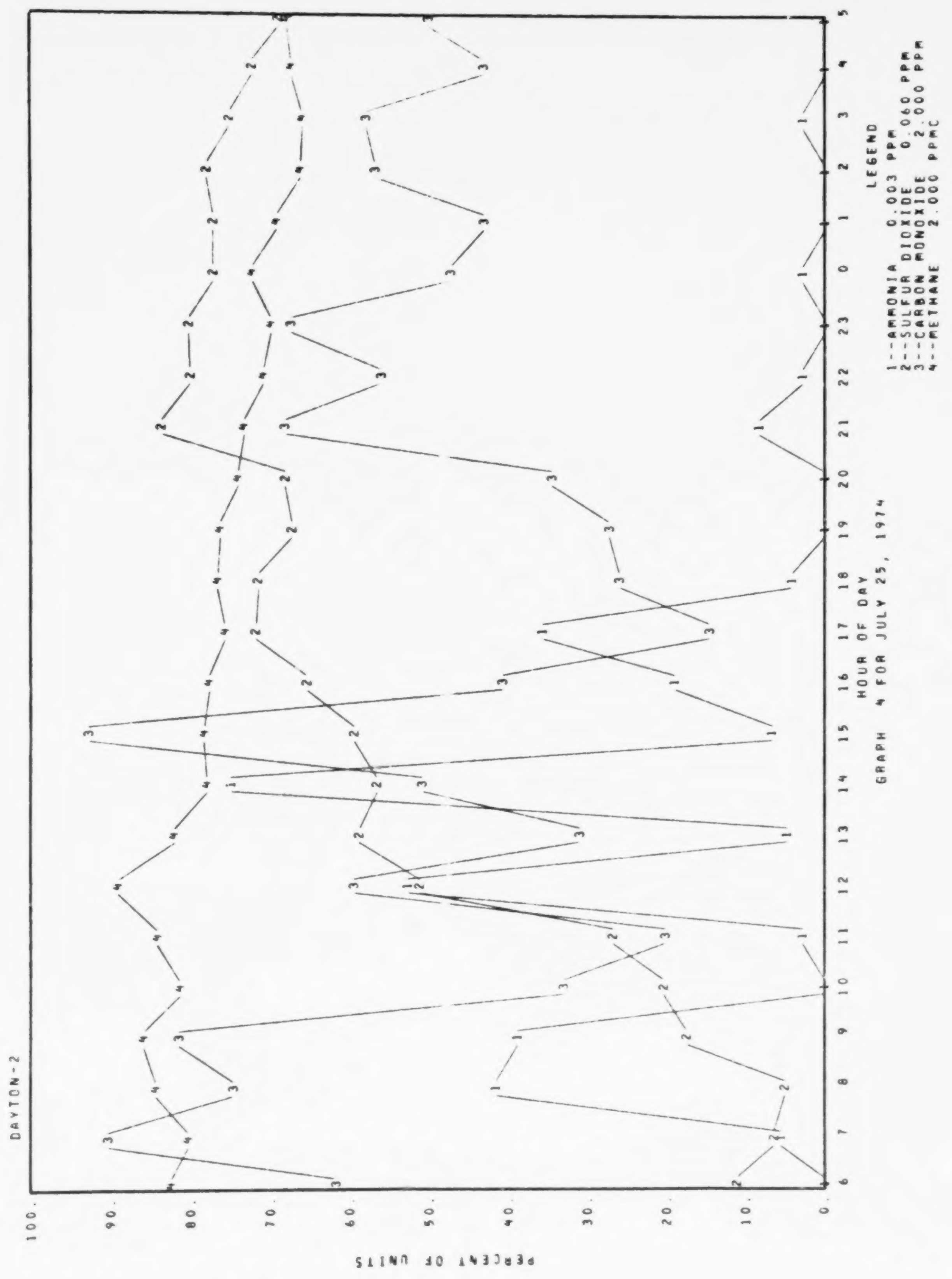
1--OZONE 0.100 PPM
2--NITRIC OXIDE 0.040 PPM
3--NITROGEN DIOXIDE 0.050 PPM
4--NITROGEN OXIDES 0.080 PPM



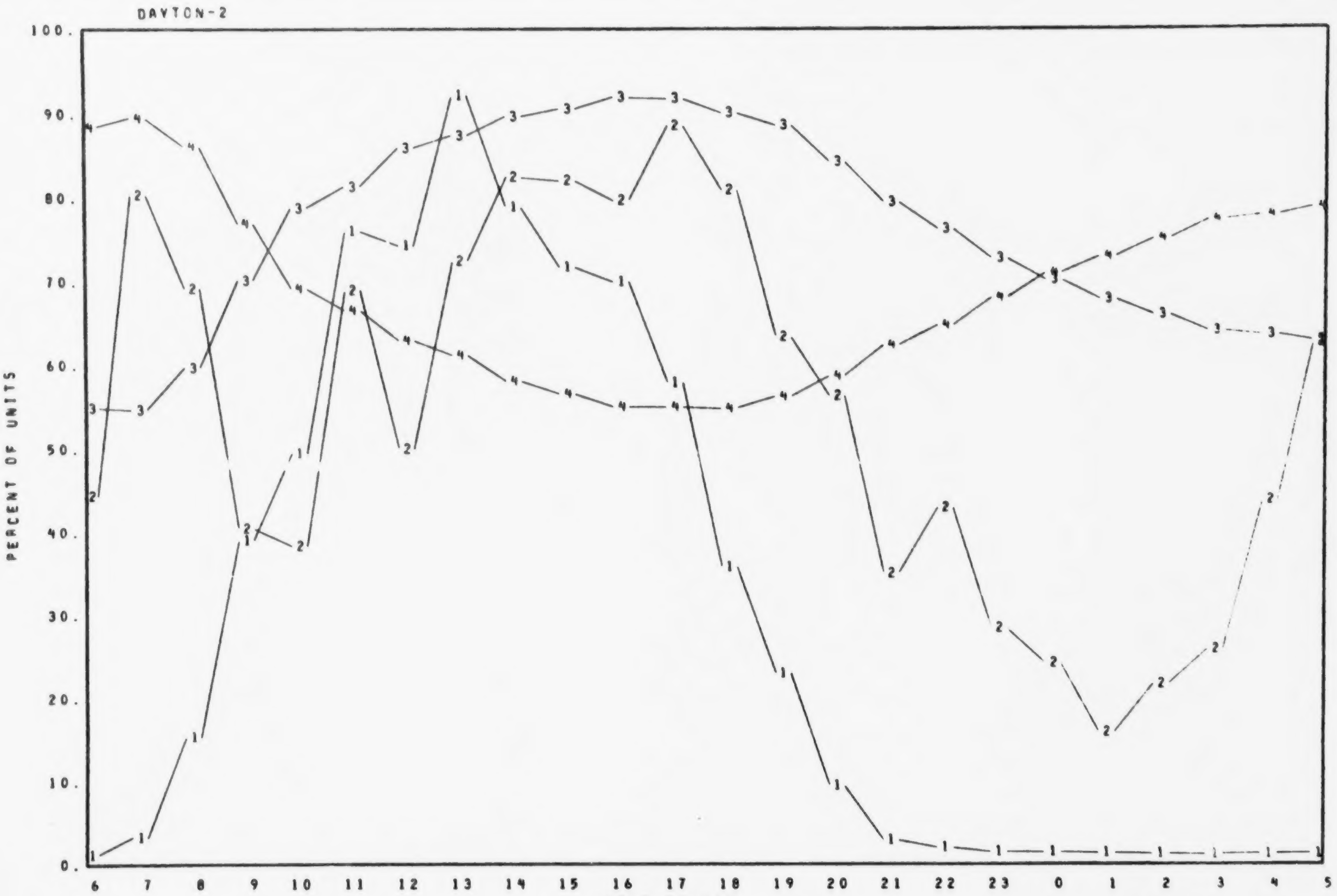
GRAPH 3 FOR JULY 25, 1974

LEGEND

1--ETHYLENE 0.020 PPMC
2--ACETYLENE 0.020 PPMC
3--ETHANE 0.020 PPMC
4--NON-METHANE HYDROCARBON 0.700 PPMC

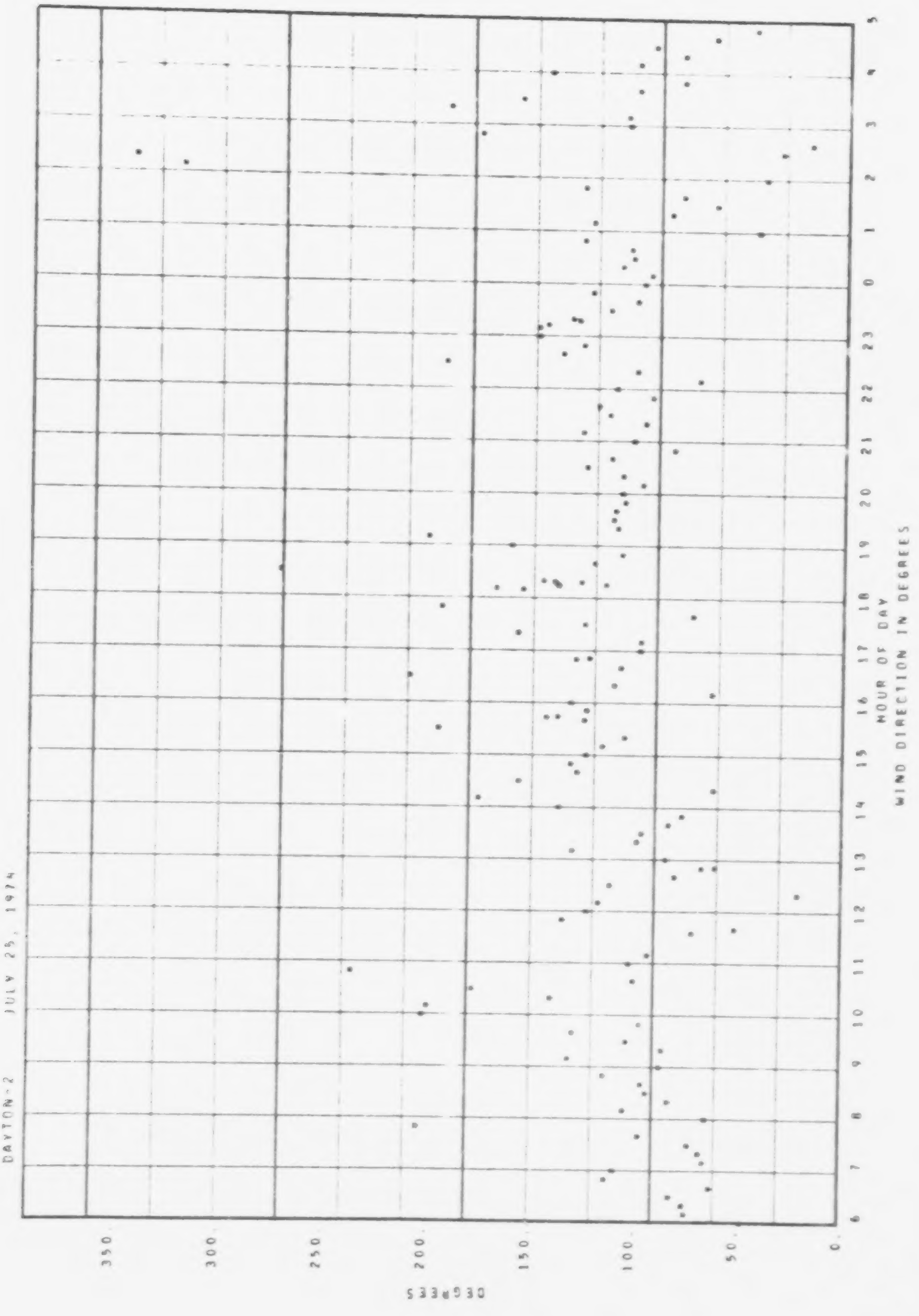


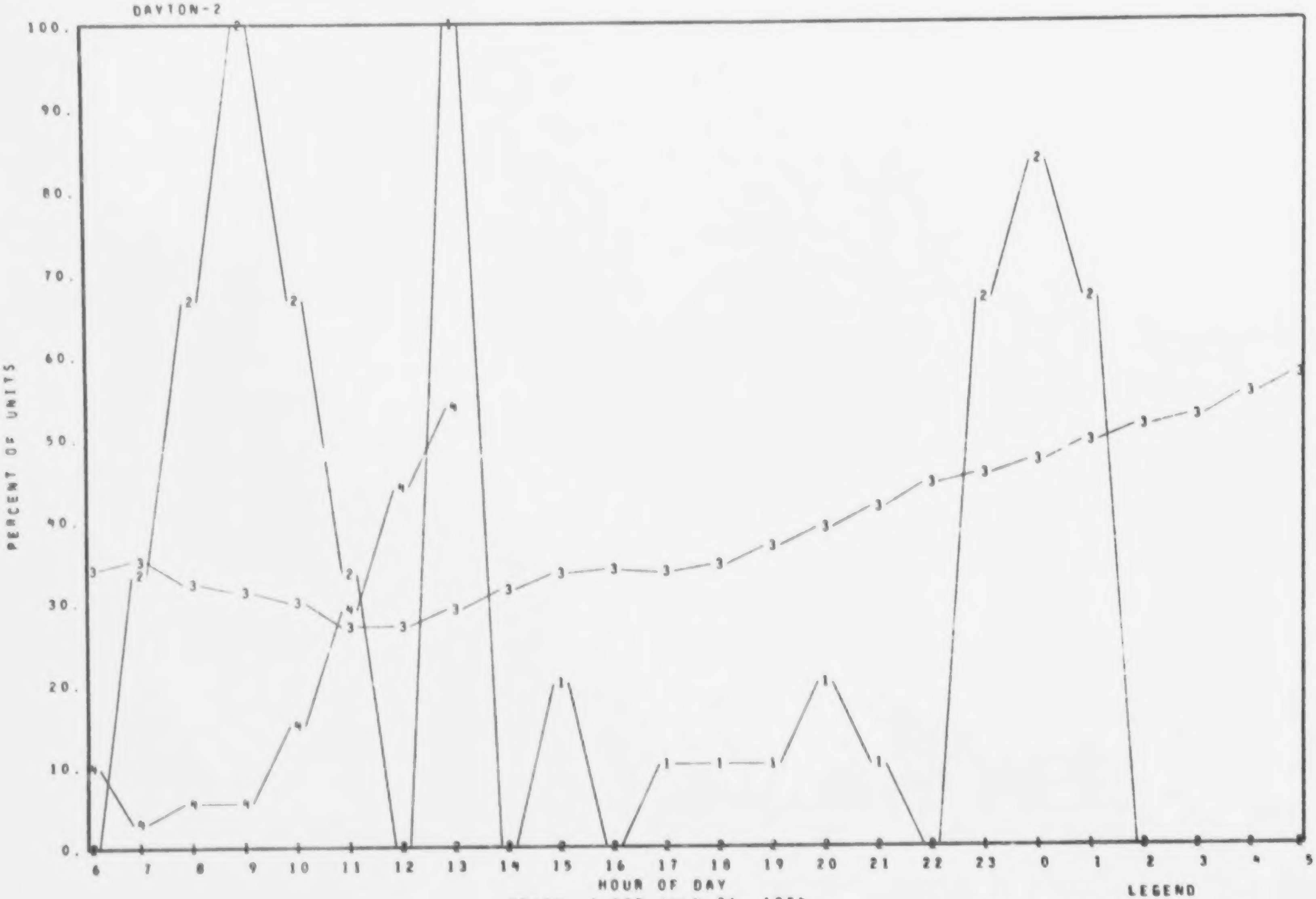
DAYTON-2
PERCENT OF UNITS
HOUR OF DAY
GRAPH 4 FOR JULY 25, 1974
LEGEND
1--AMMONIA 0.003 PPM
2--SULFUR DIOXIDE 0.060 PPM
3--CARBON MONOXIDE 2.000 PPM
4--METHANE 2.000 PPMC



GRAPH 5 FOR JULY 25, 1974

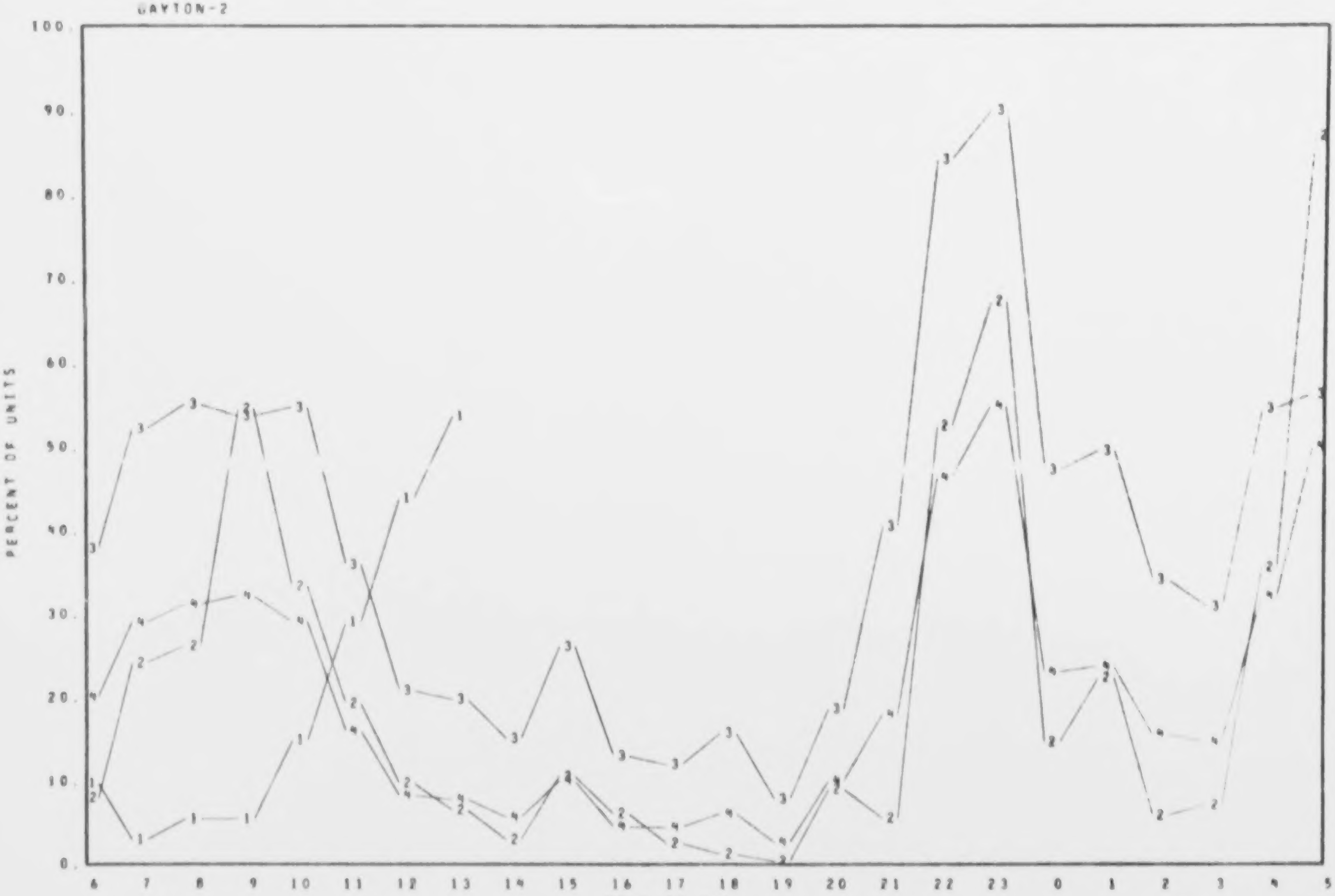
LEGEND
1--GLOBAL IRRADIANCE 1.000 CAL/SQ.CM/MI
2--WIND SPEED 8.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE HUMIDITY 90.000 PERCENT


DAYTON-2
JULY 25, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
0.
50.
100.
150.
200.
250.
300.
350.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5



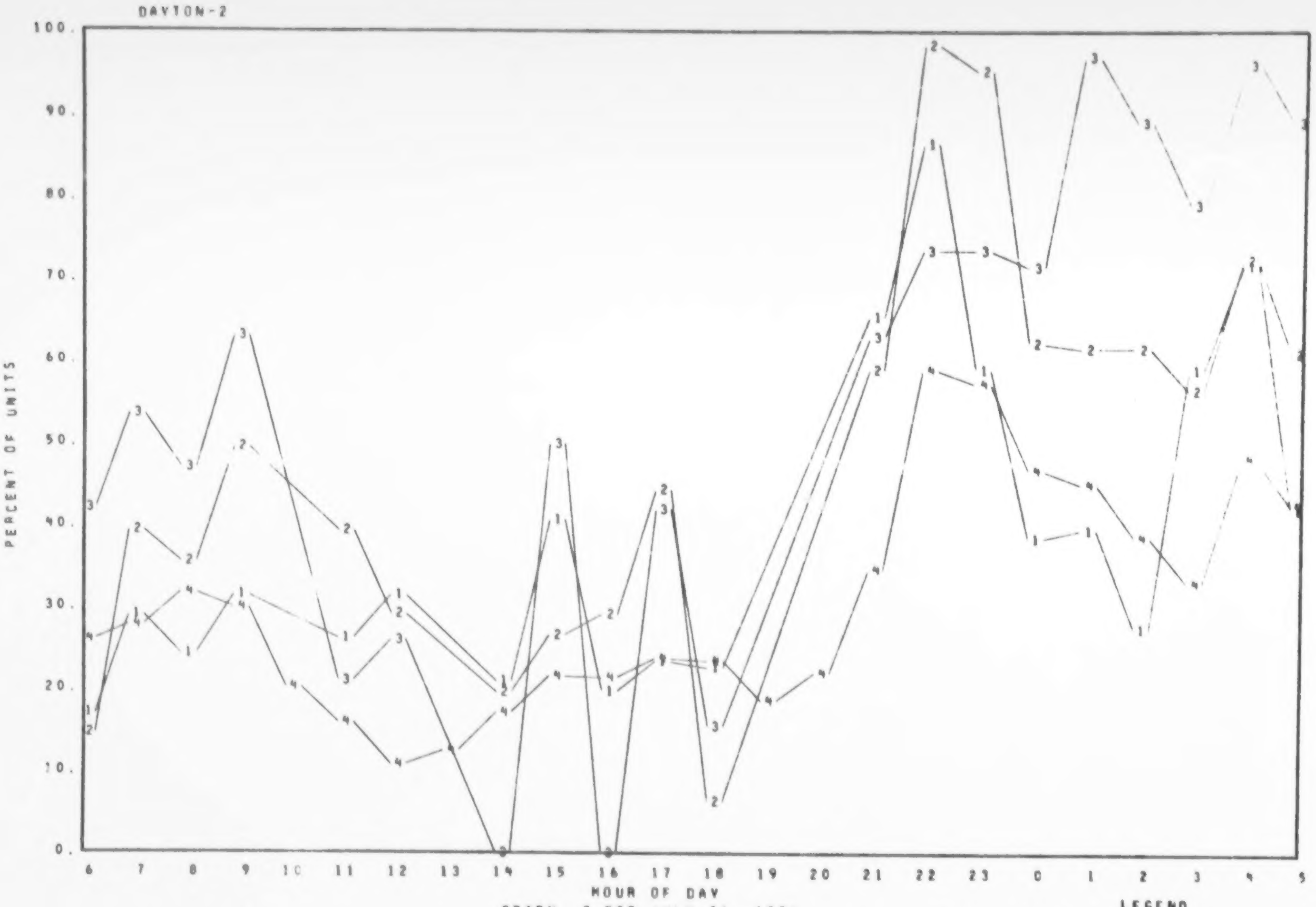
GRAPH 1 FOR JULY 26, 1974

LEGEND
1--PAN 0.010 PPM
2--NITRIC ACID 0.006 PPM
3--LIGHT SCATTERING 20.000 (10**-4)/M
4--OZONE 0.200 PPM



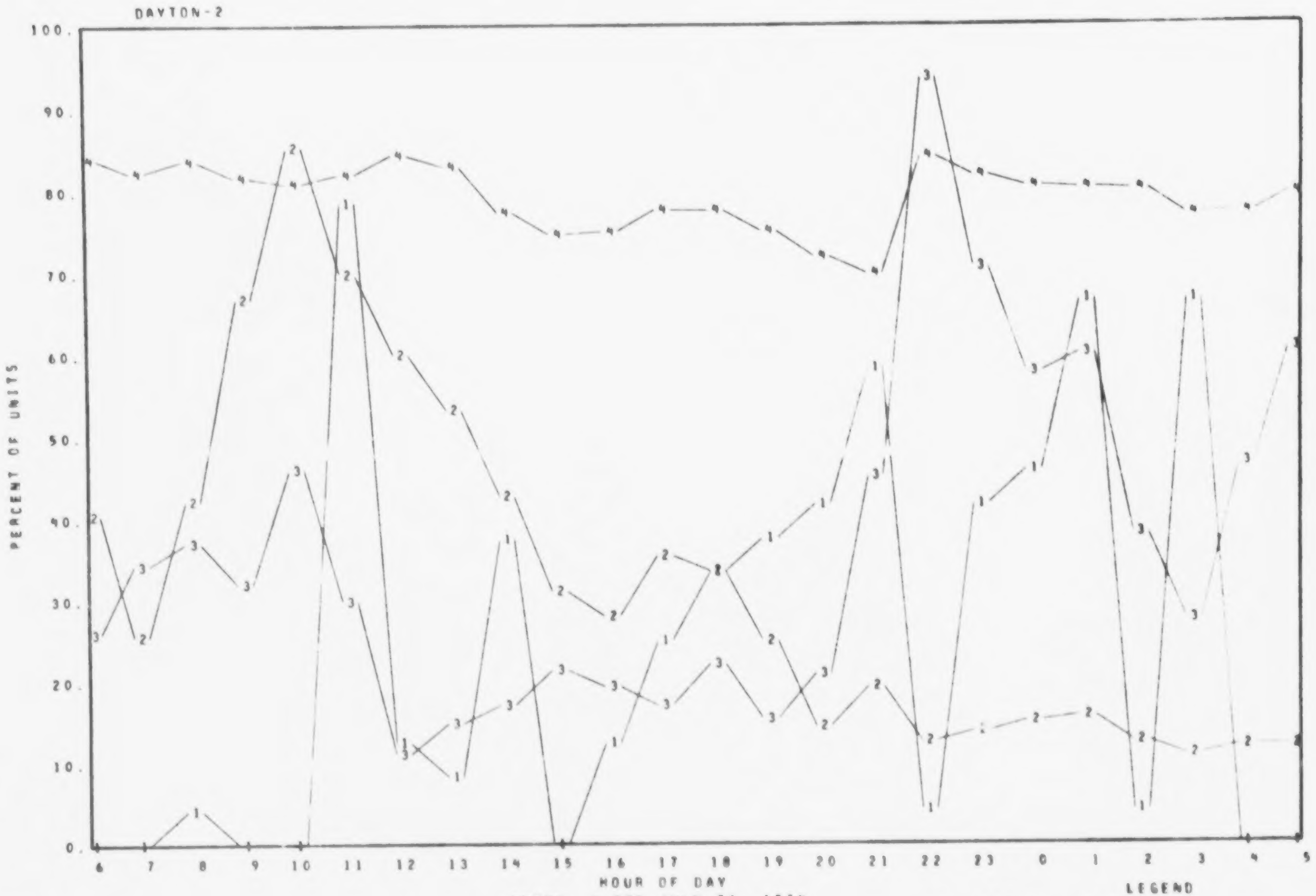
GRAPH 2 FOR JULY 26, 1974

LEGEND
1--OZONE 0.200 PPM
2--NITRIC OXIDE 0.060 PPM
3--NITROGEN DIOXIDE 0.080 PPM
4--NITROGEN OXIDES 0.200 PPM



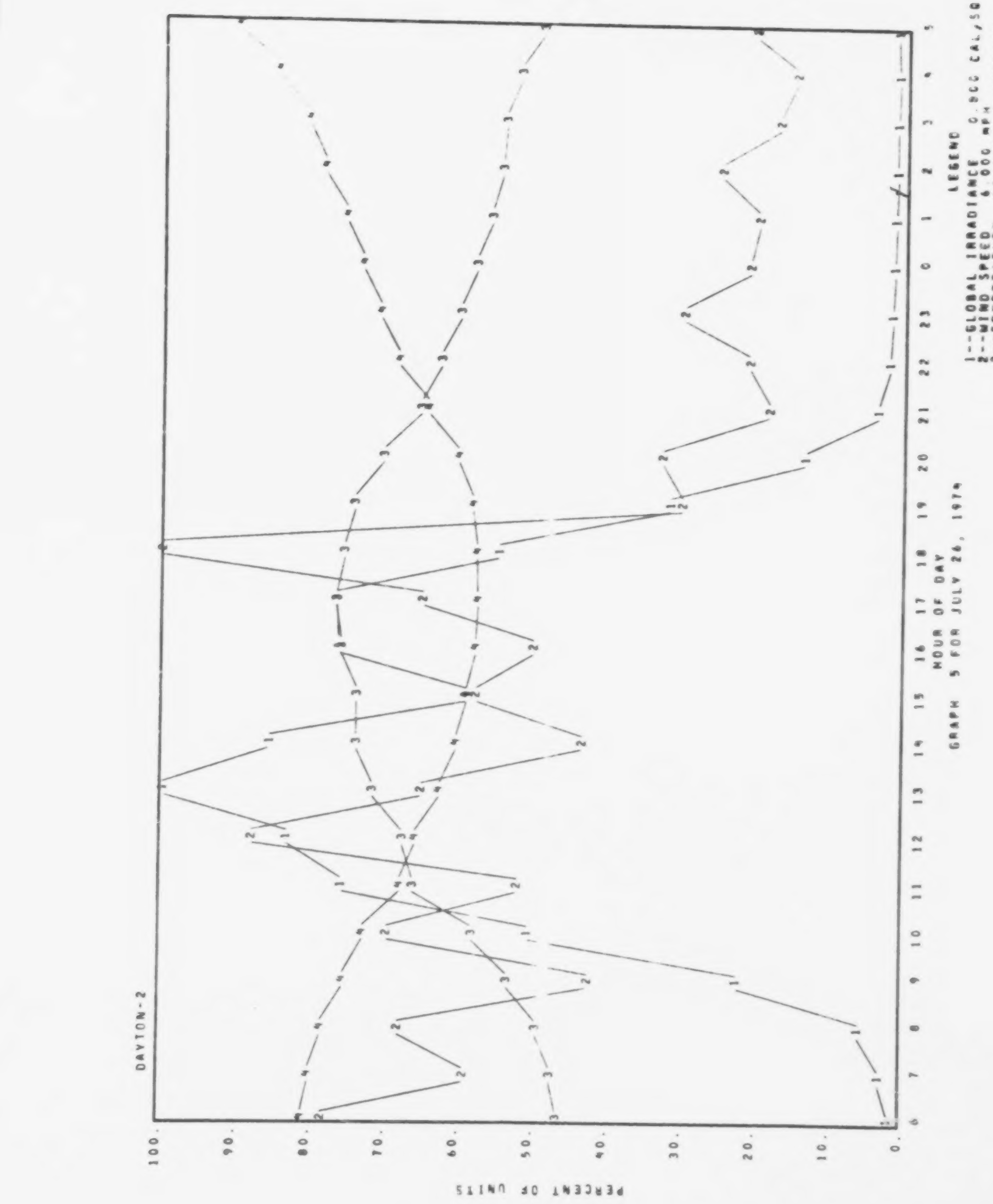
GRAPH 3 FOR JULY 26, 1974

LEGEND
1--ETHYLENE 0.040 PPMC
2--ACETYLENE 0.009 PPMC
3--ETHANE 0.020 PPMC
4--NON-METHANE HYDROCARBON 2.000 PPMC

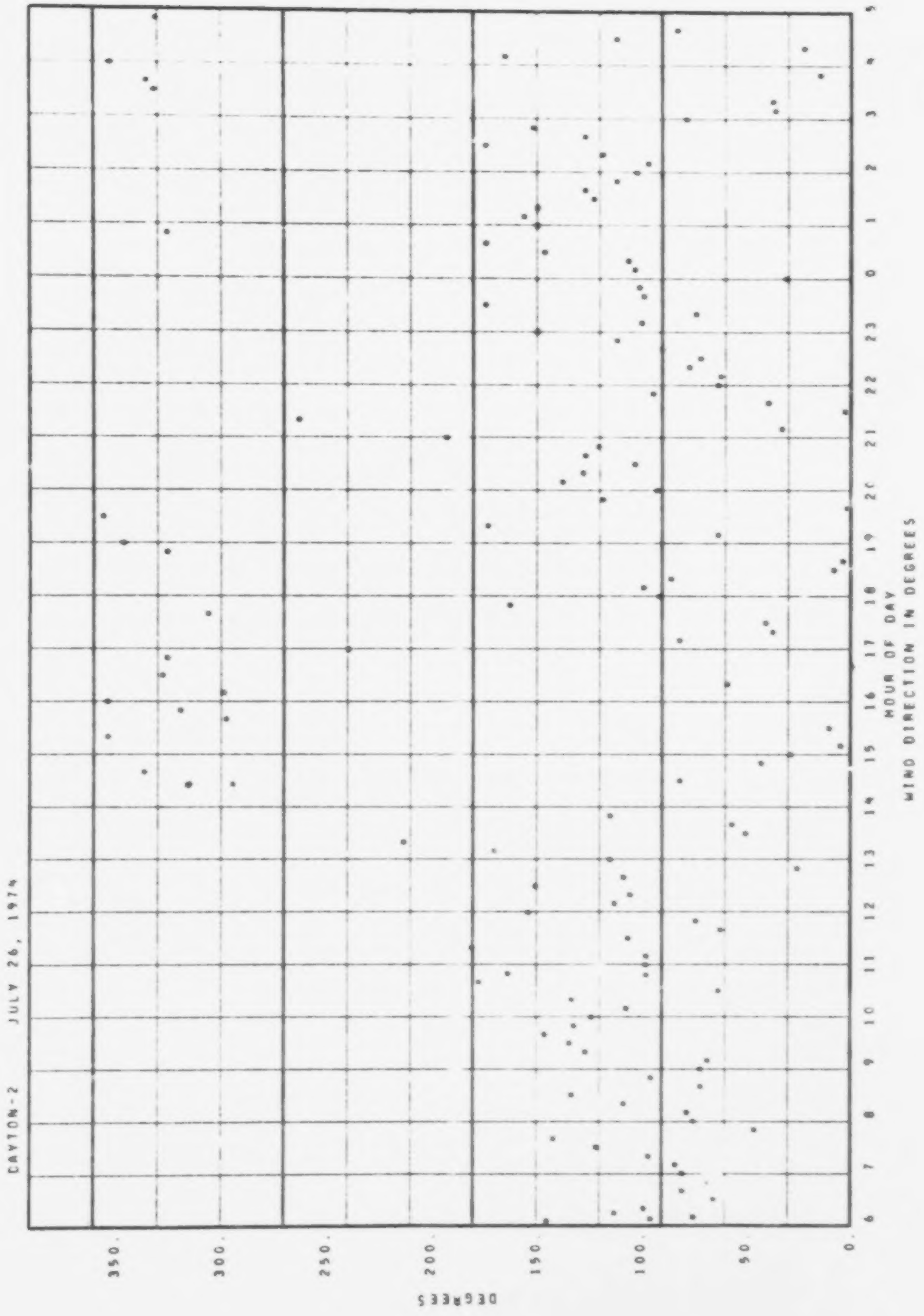


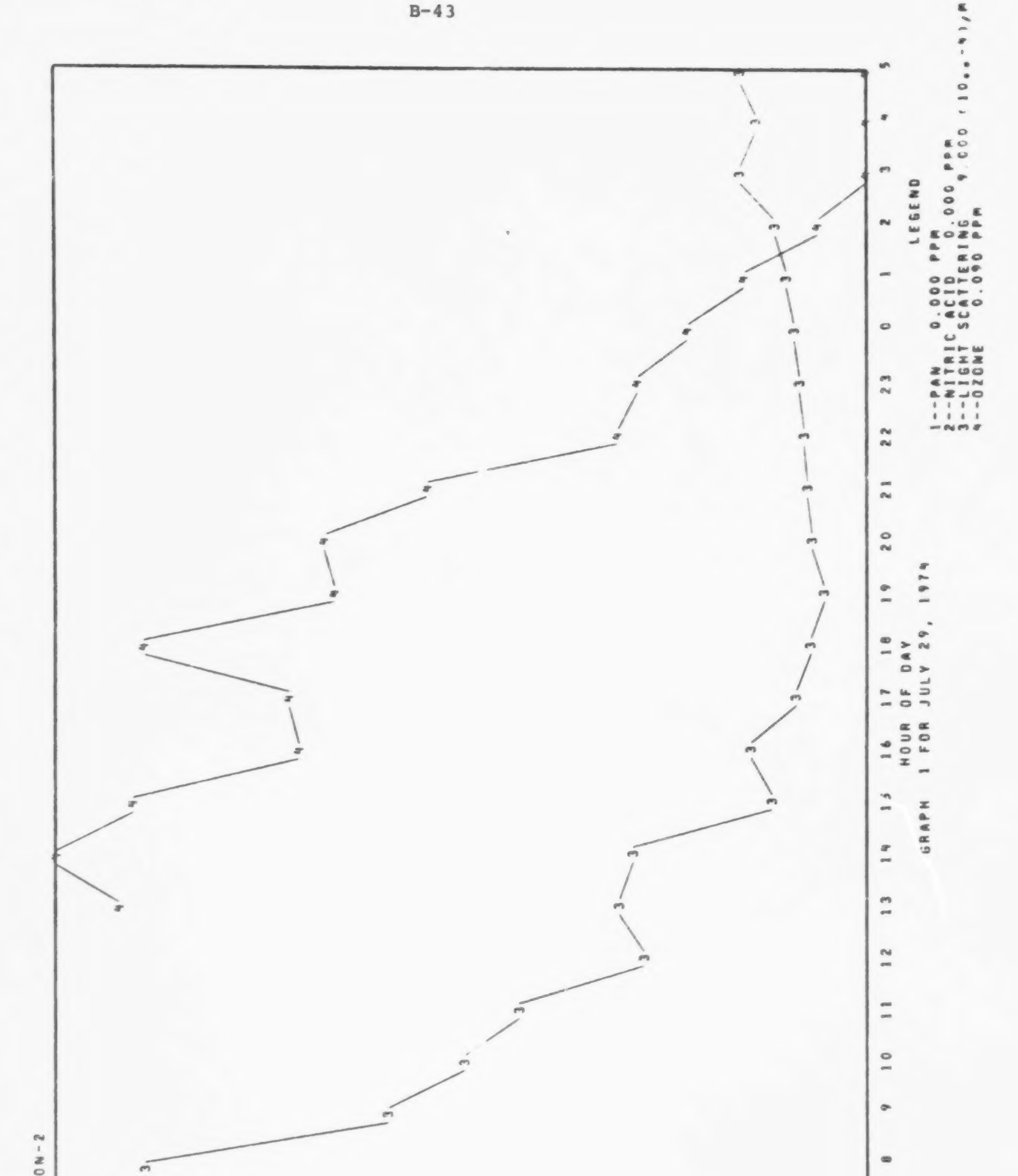
GRAPH 4 FOR JULY 26, 1974

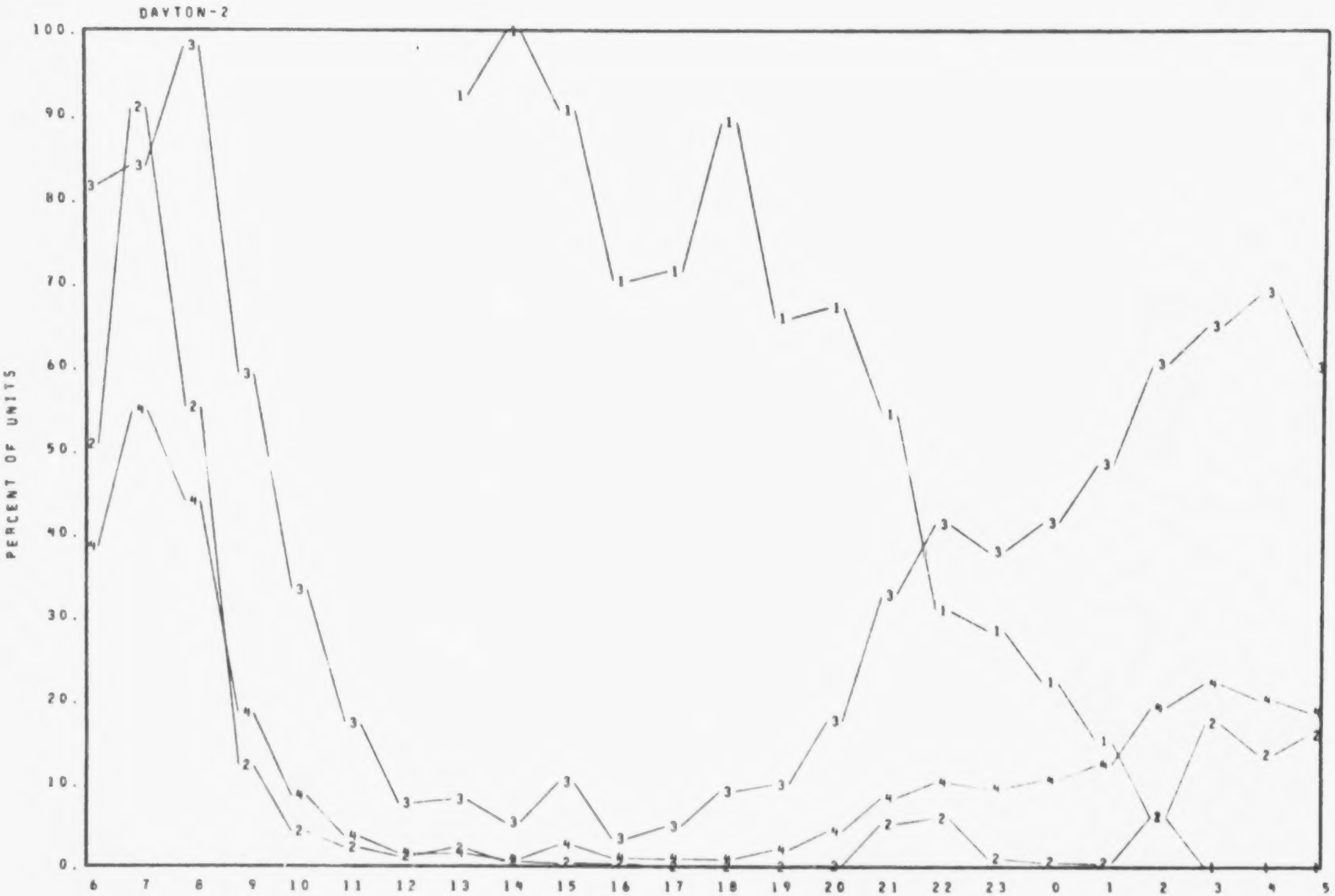
LEGEND
1--AMMONIA 0.002 PPM
2--SULFUR DIOXIDE 0.040 PPM
3--CARBON MONOXIDE 4.000 PPM
4--METHANE 2.000 PPMC



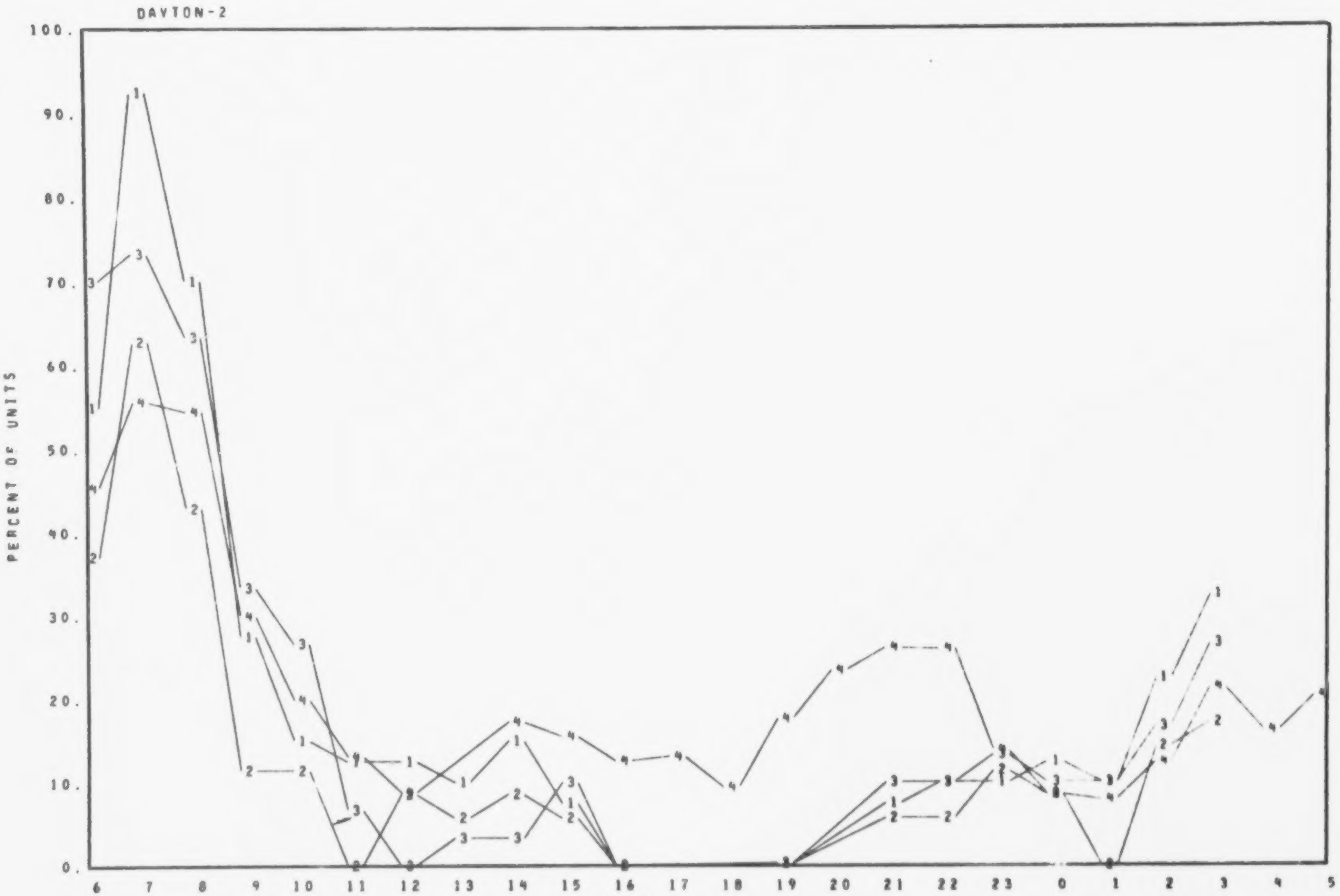
GRAPH 5 FOR JULY 26, 1974


DAYTON-2 JULY 26, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5


DAYTON-2
PERCENT OF UNITS
100. 90. 80. 70. 60. 50. 40. 30. 20. 10. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 1 FOR JULY 29, 1974
LEGEND
1--PAN 0.000 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 9.000 (10..-4)/M
4--OZONE 0.090 PPM

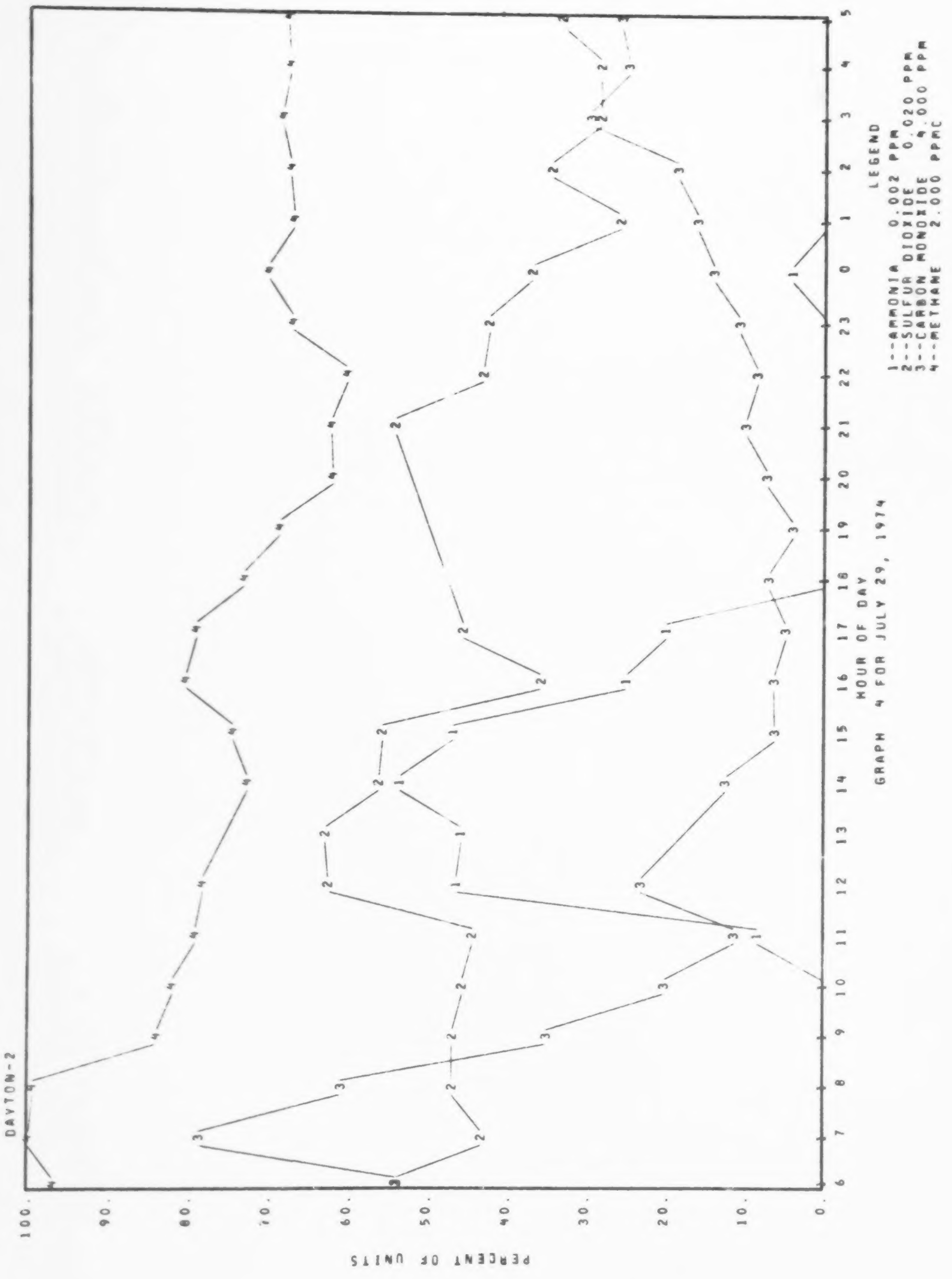


GRAPH 2 FOR JULY 29, 1974

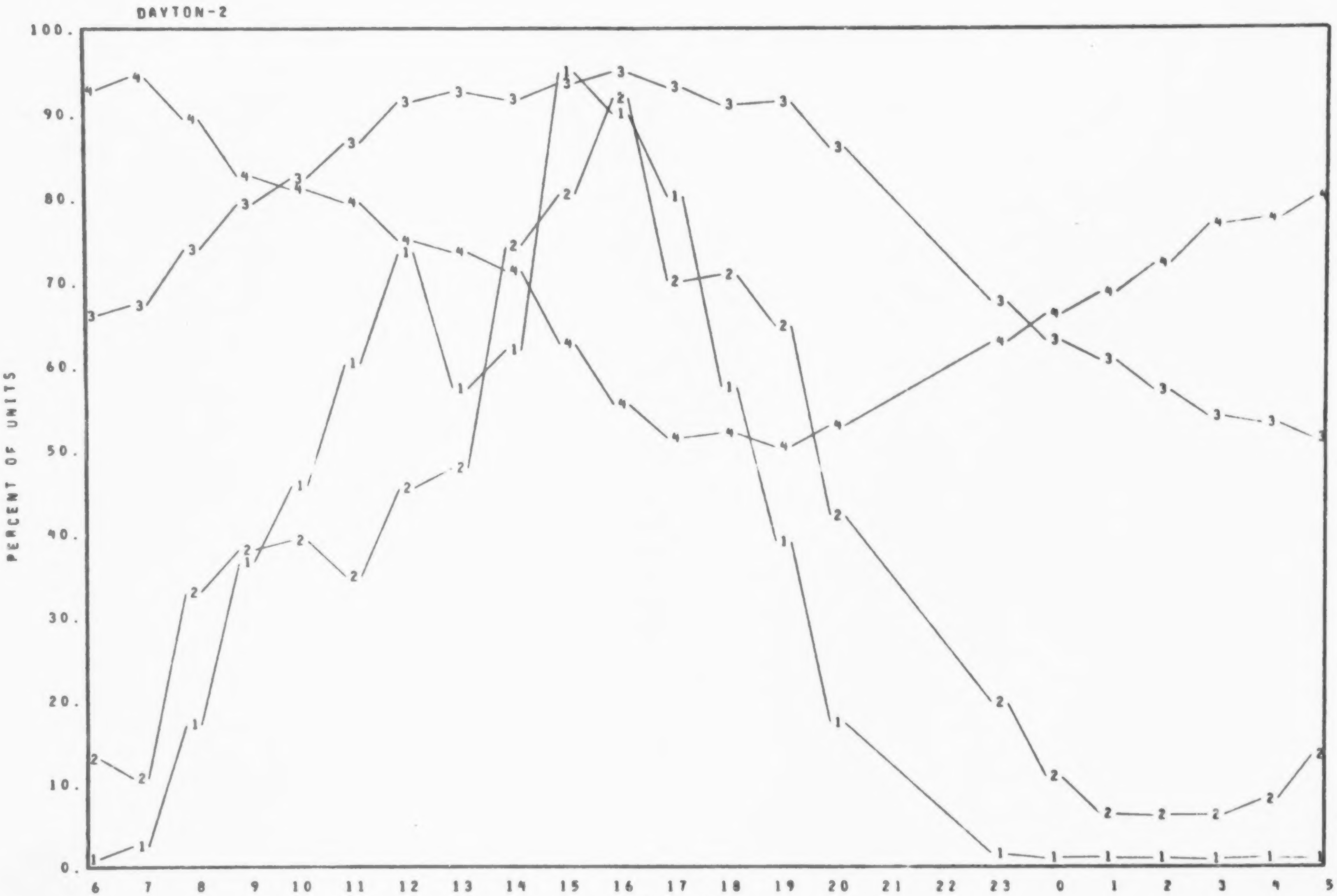


GRAPH 3 FOR JULY 29, 1974

LEGEND
1--ETHYLENE 0.040 PPMC
2--ACETYLENE 0.020 PPMC
3--ETHANE 0.030 PPMC
4--NON-METHANE HYDROCARBON 2.000 PPMC

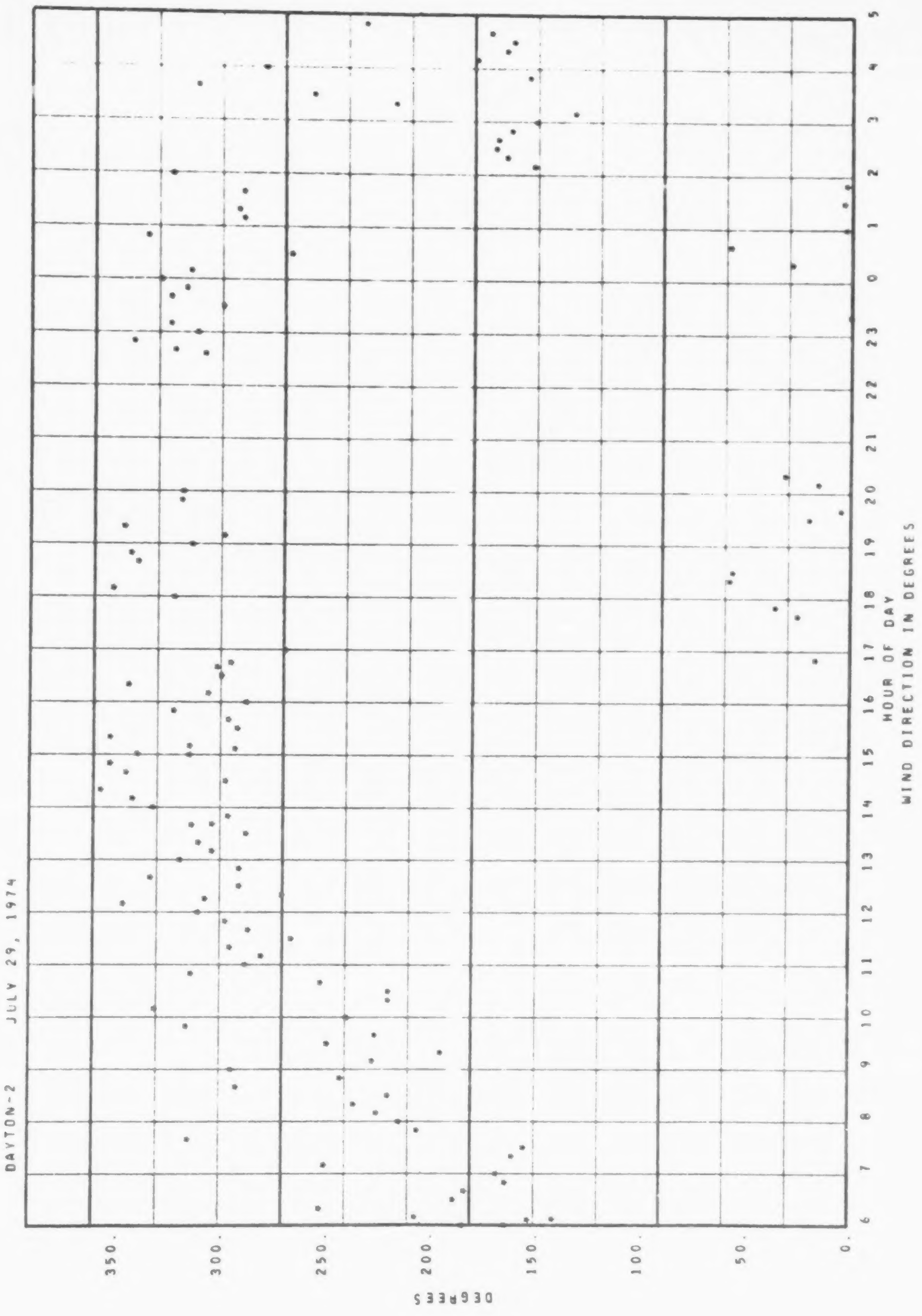


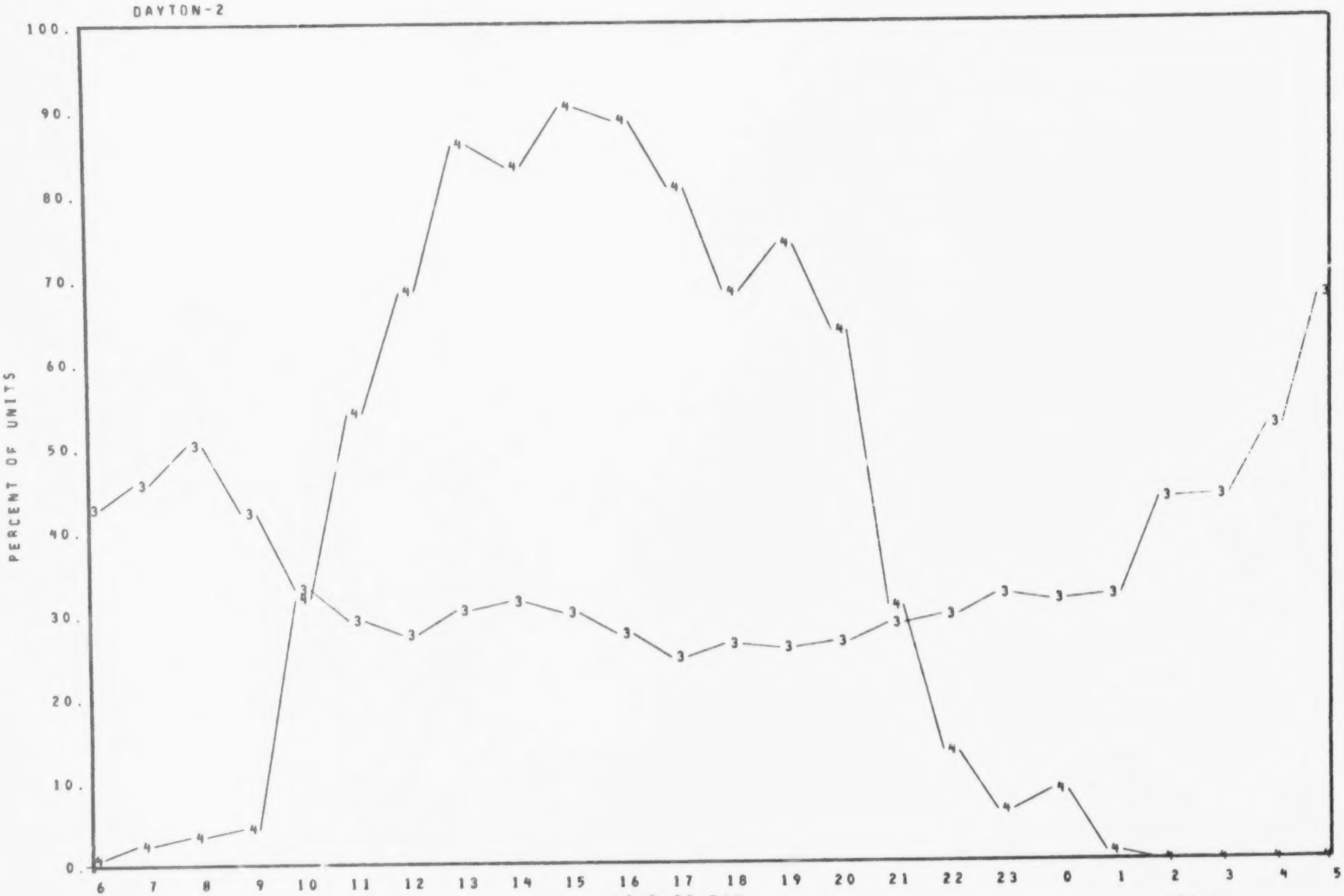
GRAPH 4 FOR JULY 29, 1974



GRAPH 5 FOR JULY 29, 1974

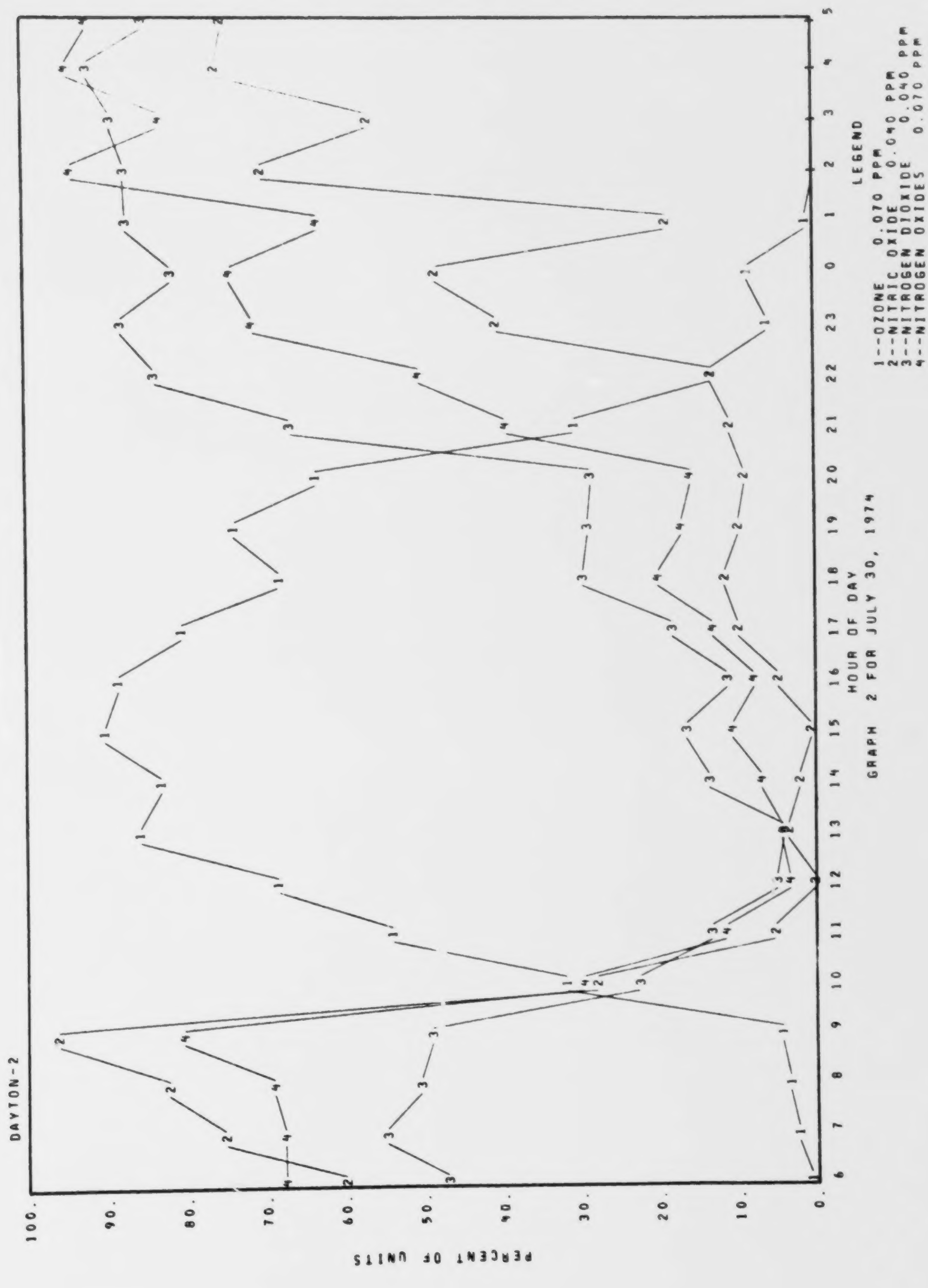
LEGEND
1--GLOBAL IRRADIANCE 1.000 CAL/SQ.CM/MIN
2--WIND SPEED 20.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE HUMIDITY 90.000 PERCENT


DAYTON-2 JULY 29, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

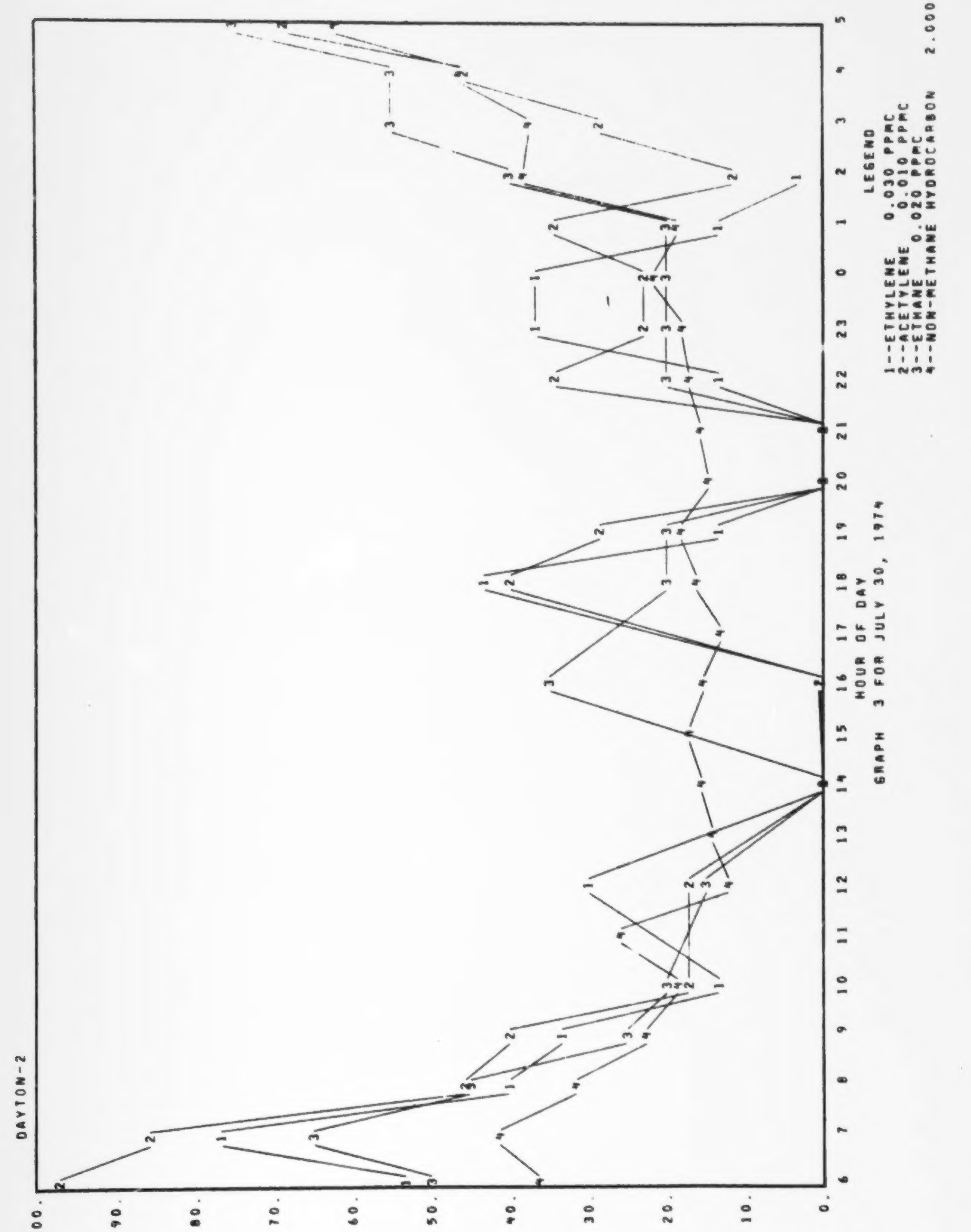


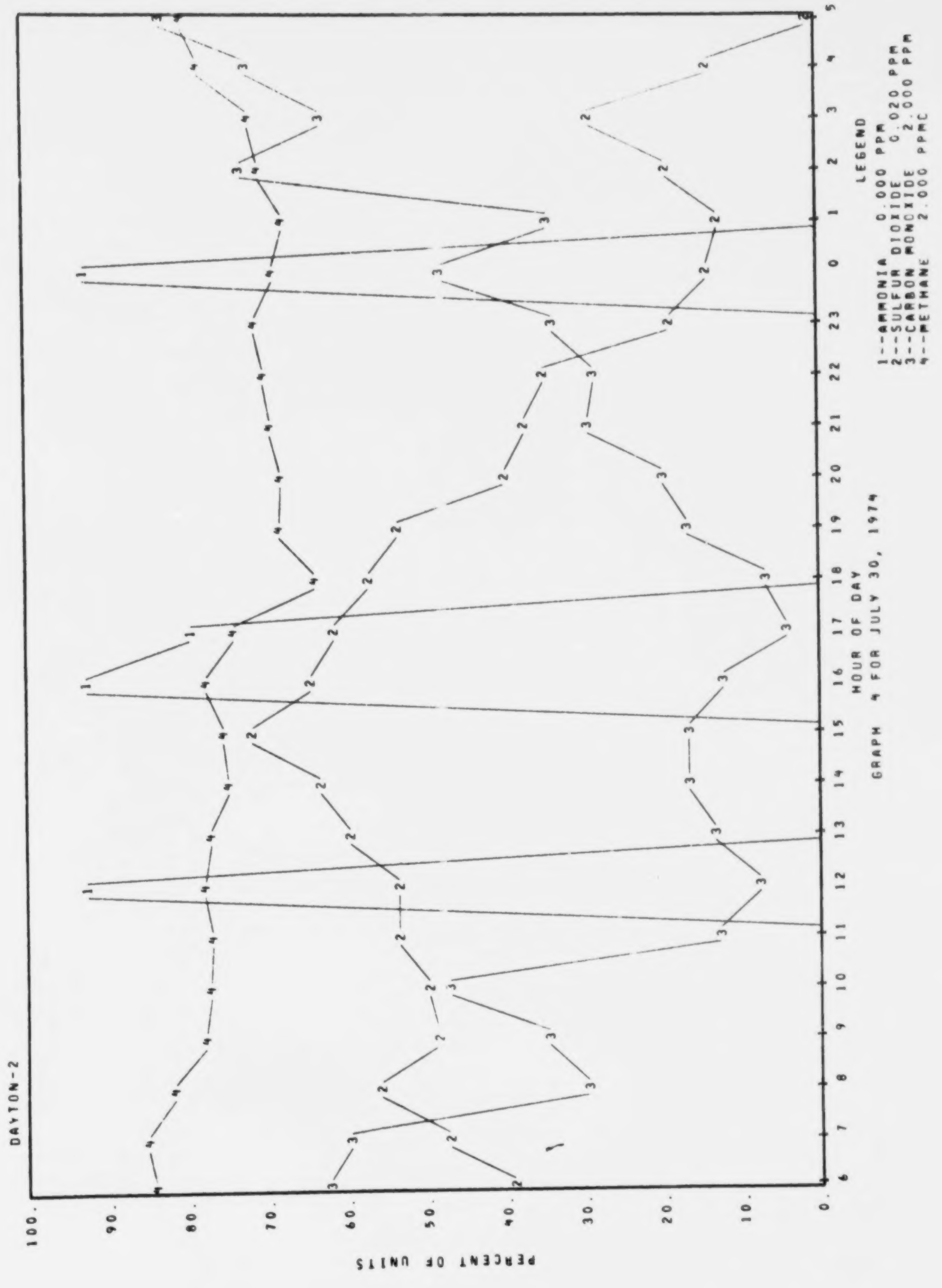
GRAPH 1 FOR JULY 30, 1974

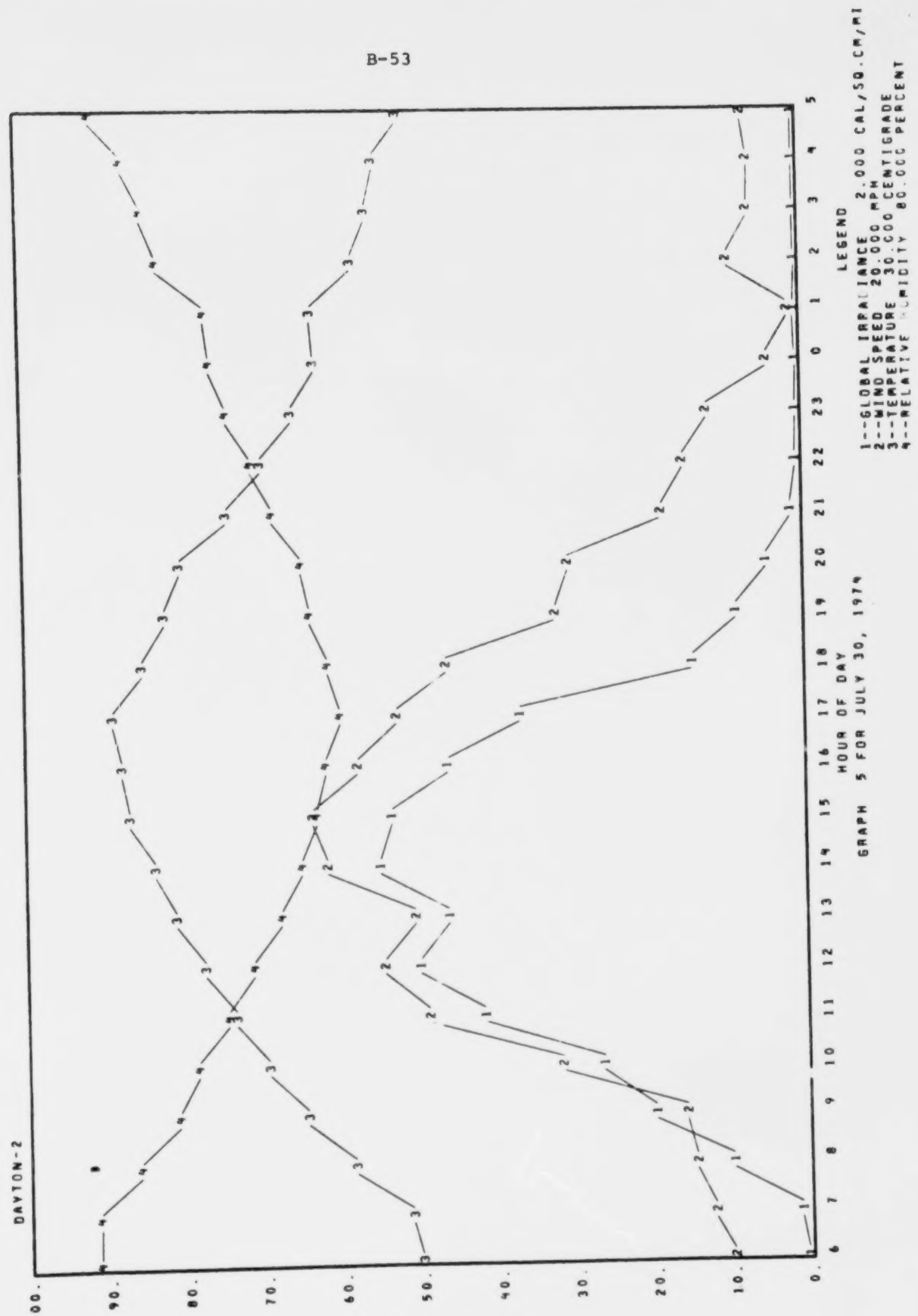
LEGEND
1--PAN 0.000 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 3.000 (10..-4)/M
4--OZONE 0.070 PPM

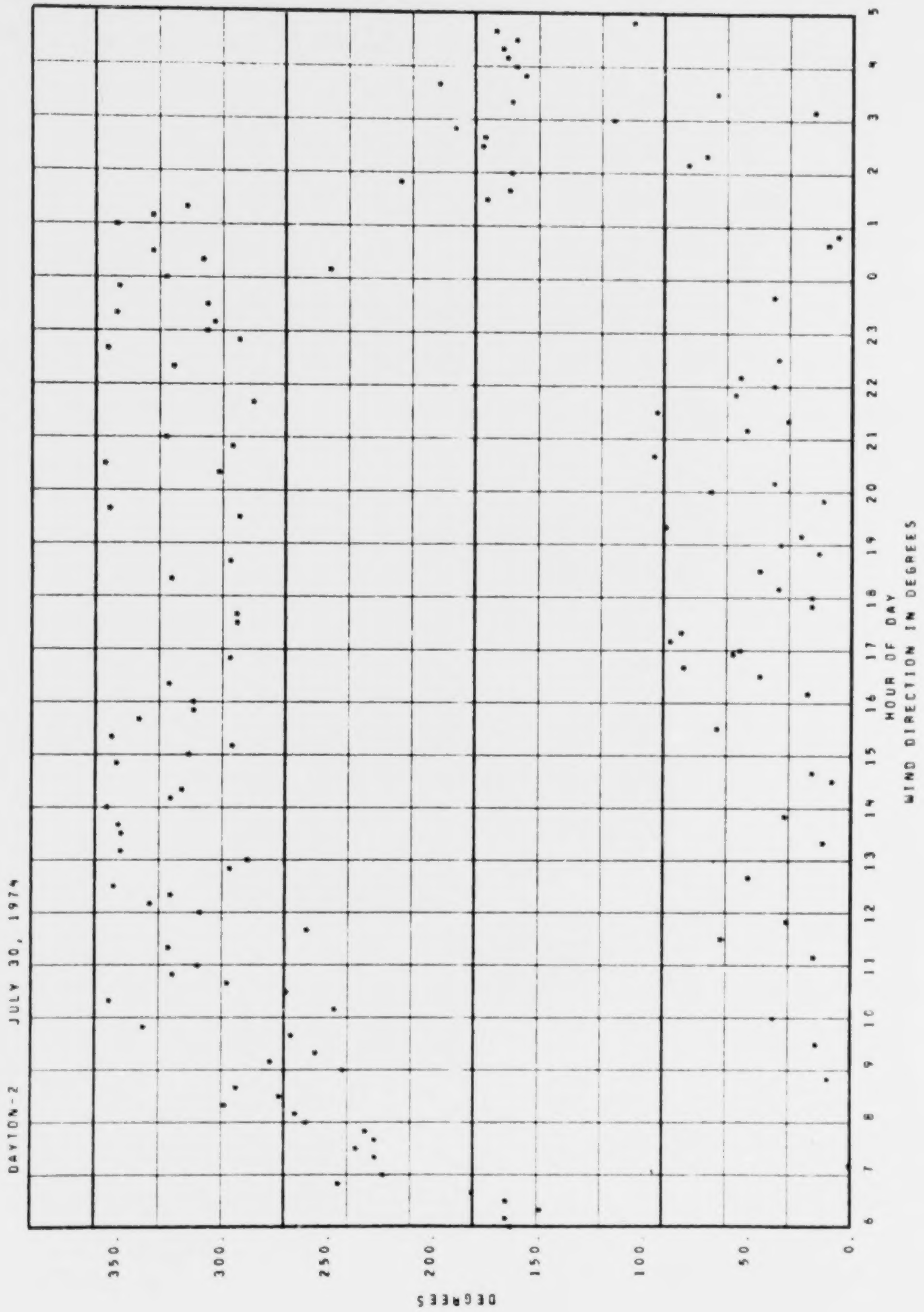


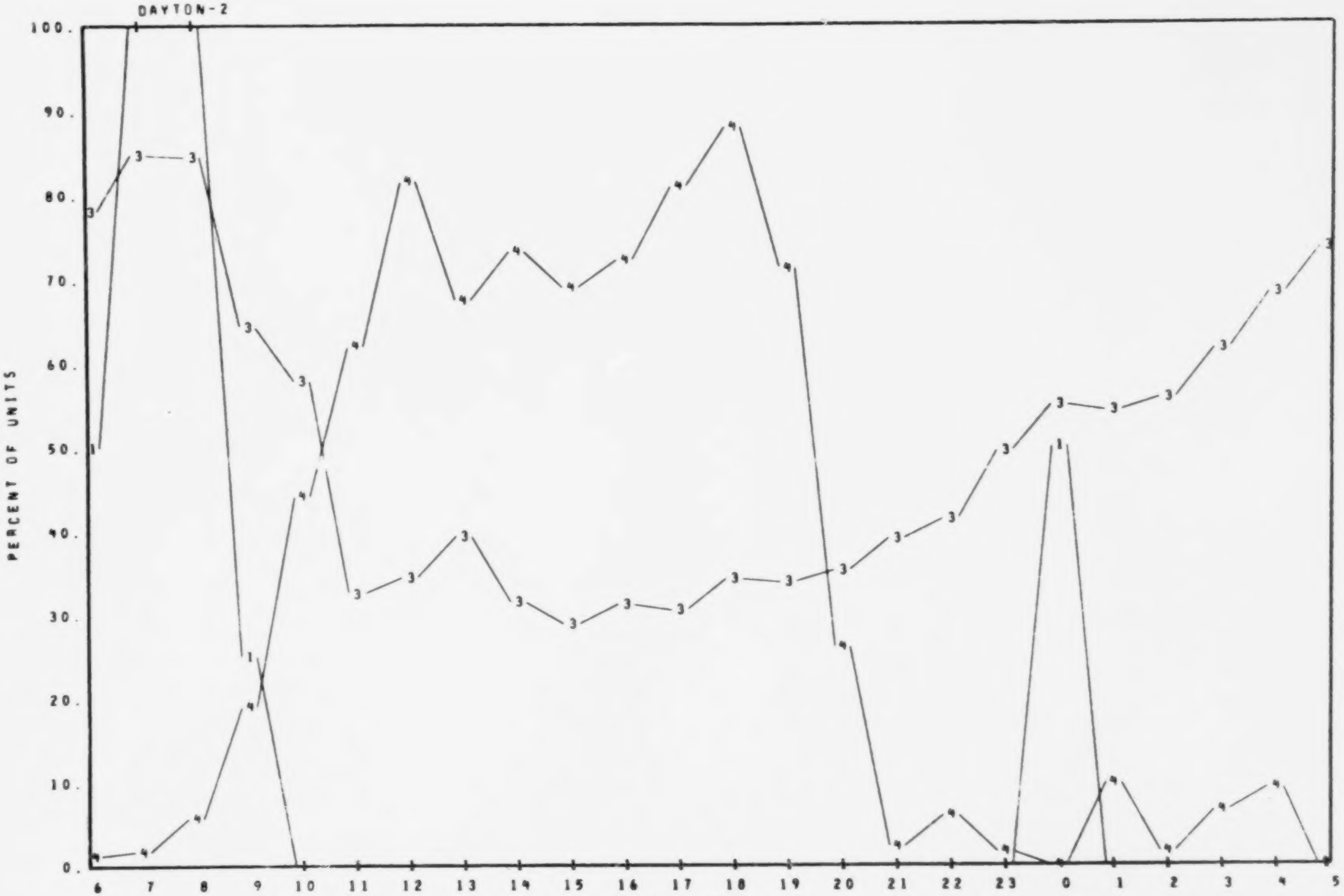
GRAPH 2 FOR JULY 30, 1974


DAYTON-2
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 3 FOR JULY 30, 1974
LEGEND
1--ETHYLENE 0.030 PPMC
2--ACETYLENE 0.010 PPMC
3--ETHANE 0.020 PPMC
4--NON-METHANE HYDROCARBON 2.000 PPMC


DAYTON-2
PERCENT OF UNITS
100. 90. 80. 70. 60. 50. 40. 30. 20. 10. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 4 FOR JULY 30, 1974
LEGEND
1--AMMONIA 0.000 PPM
2--SULFUR DIOXIDE 0.020 PPM
3--CARBON MONOXIDE 2.000 PPM
4--METHANE 2.000 PPMC


DAYTON-2
PERCENT OF UNITS
HOUR OF DAY
GRAPH 5 FOR JULY 30, 1974
LEGEND
1--GLOBAL IRRADIANCE 2.000 CAL/SQ.CM/MI
2--WIND SPEED 20.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE HUMIDITY 80.000 PERCENT

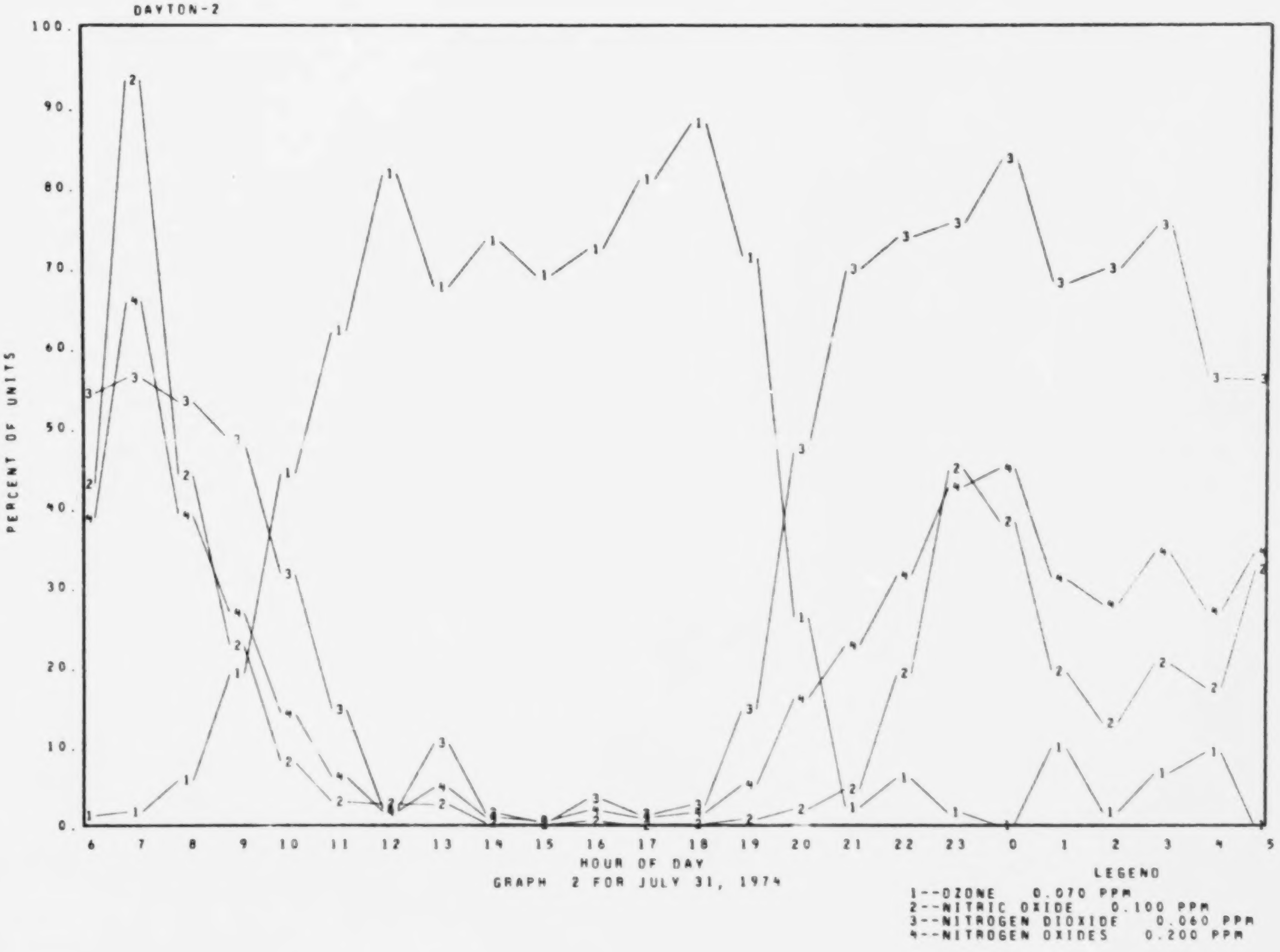

DAYTON-2
JULY 30, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5



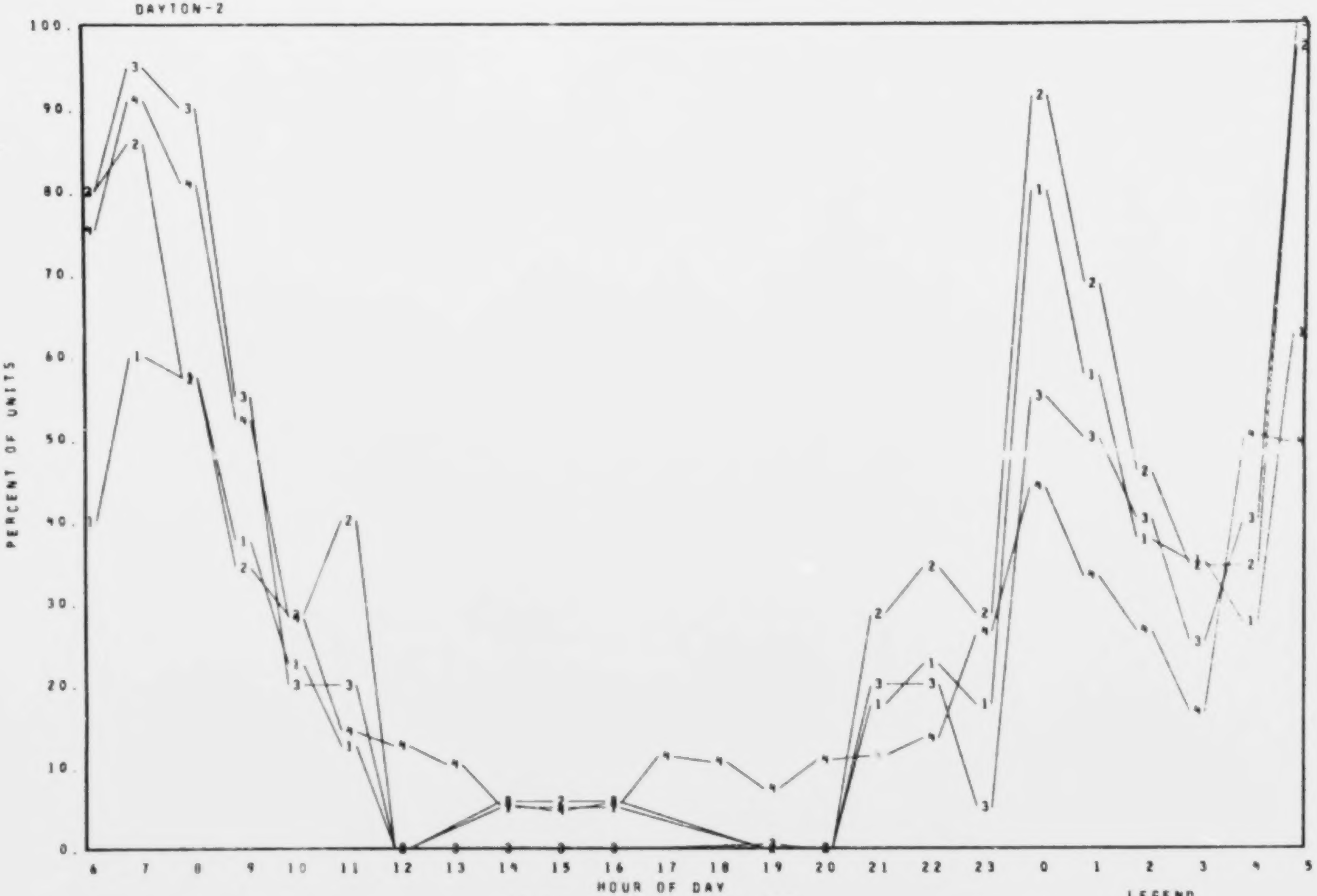
GRAPH 1 FOR JULY 31, 1974

LEGEND

1--PAN 0.004 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 3.000 (10..-4)/M
4--OZONE 0.070 PPM

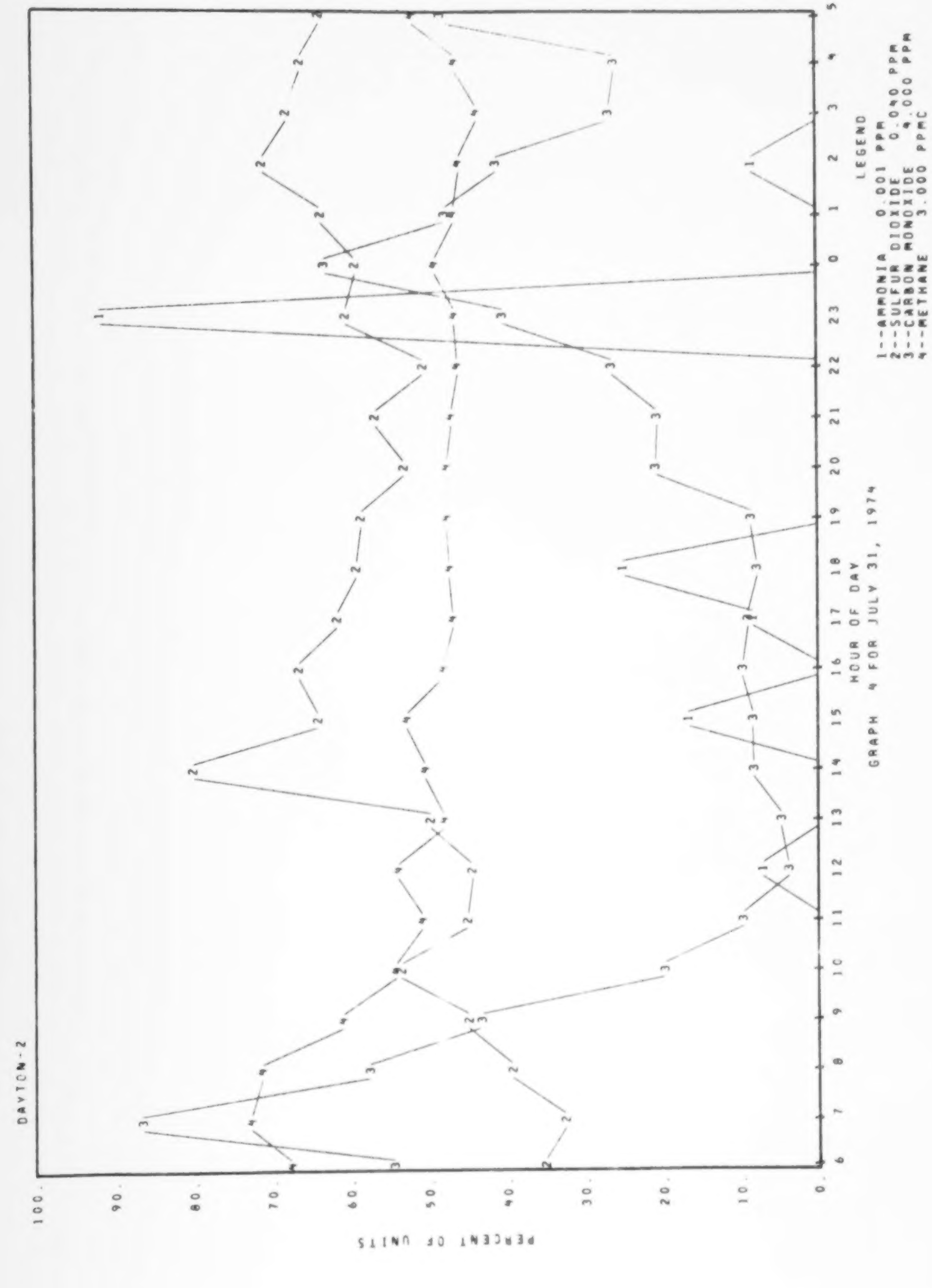


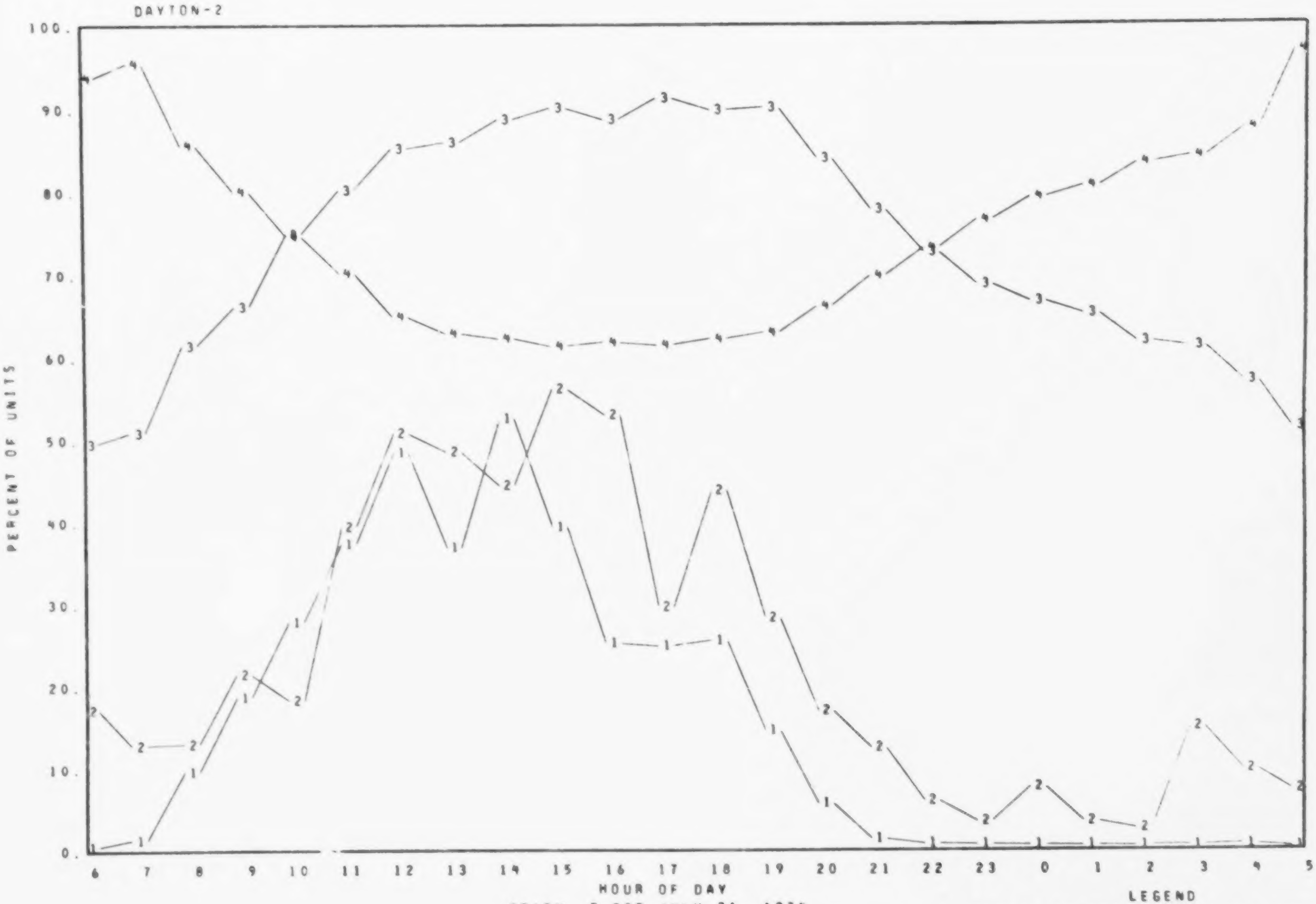
GRAPH 2 FOR JULY 31, 1974



GRAPH 3 FOR JULY 31, 1974

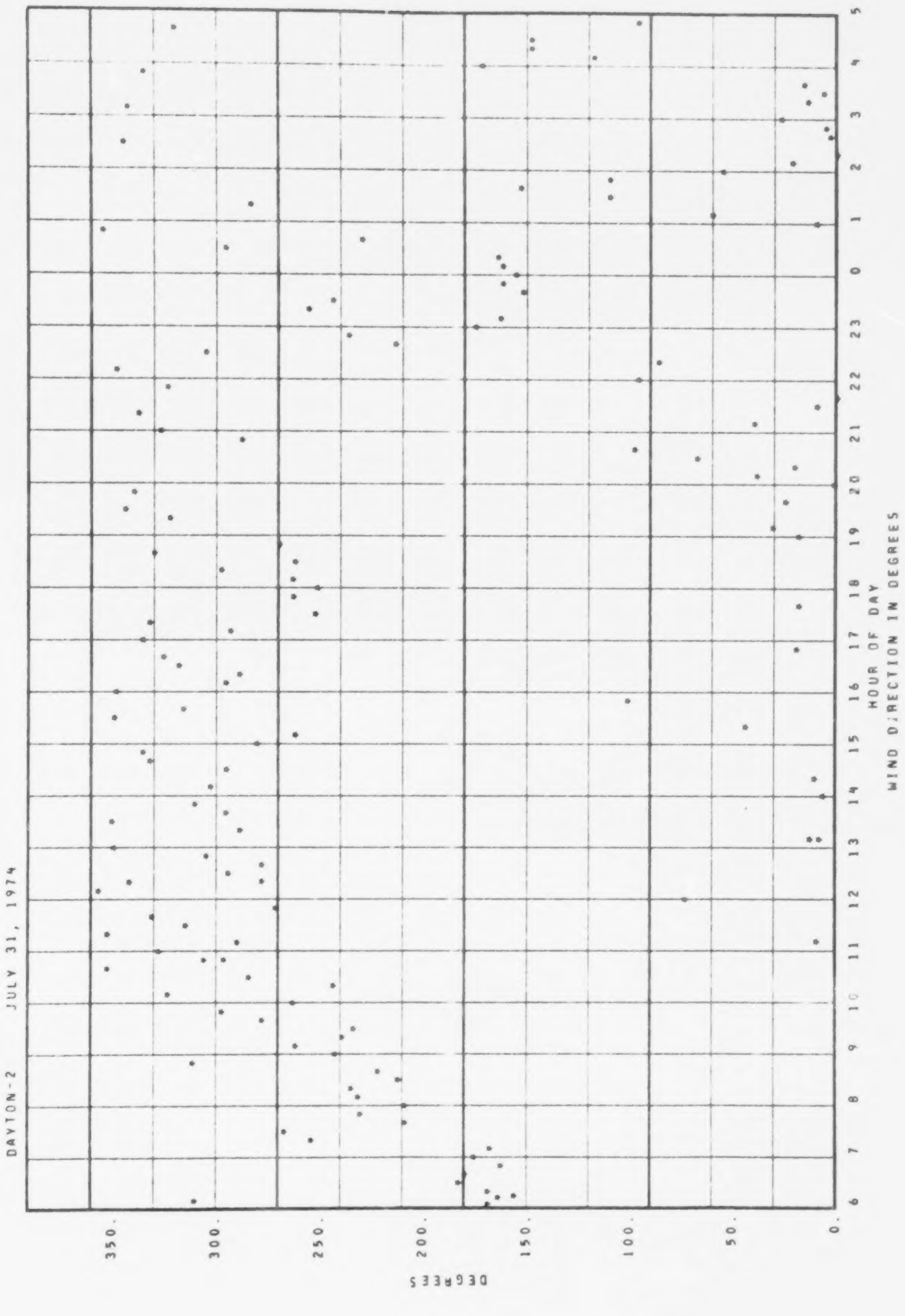
LEGEND
1--ETHYLENE 0.040 PPMC
2--ACETYLENE 0.010 PPMC
3--ETHANE 0.020 PPMC
4--NON-METHANE HYDROCARBON 2.000 PPMC

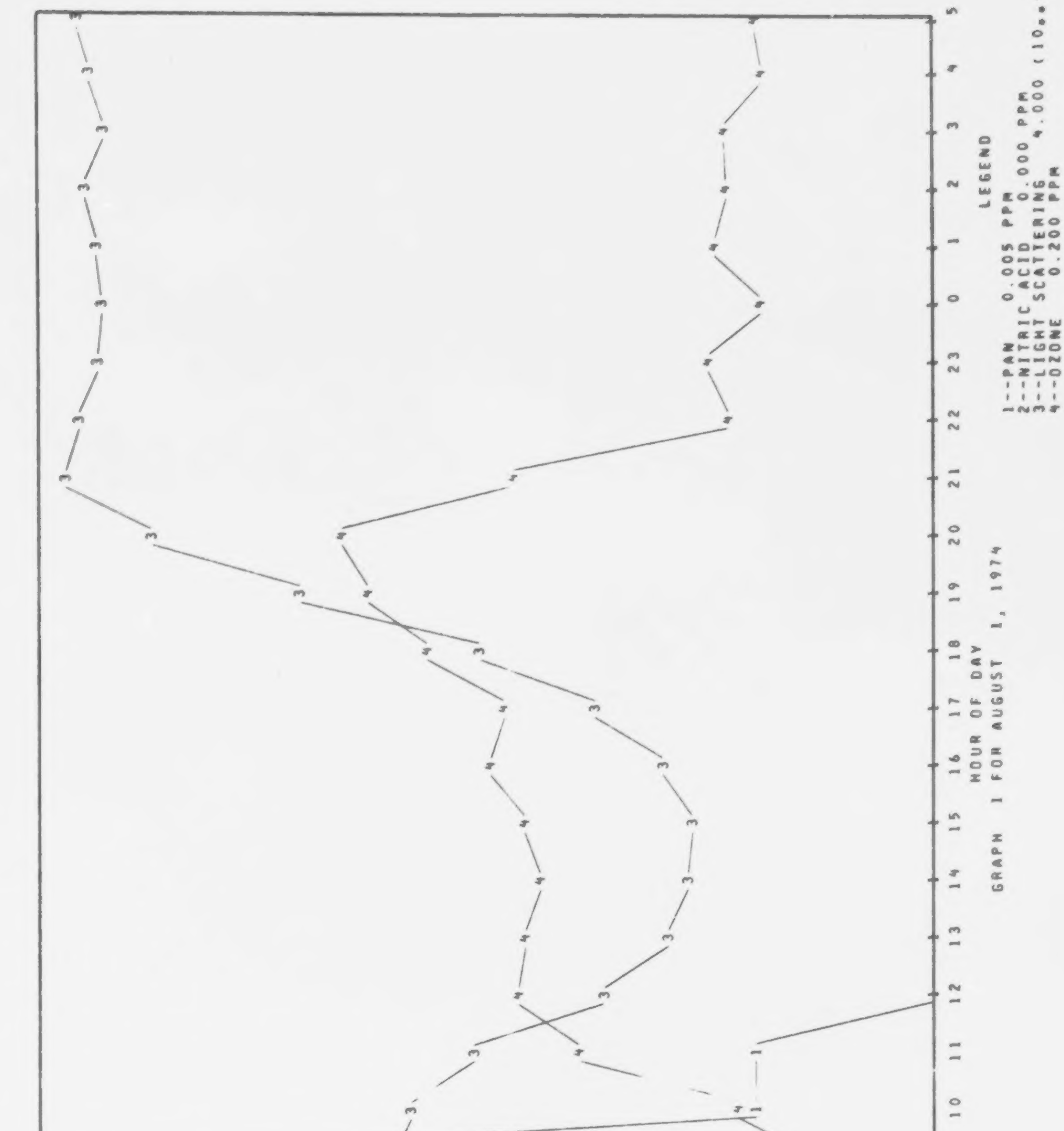

DAYTON-2
PERCENT OF UNITS
HOUR OF DAY
GRAPH 4 FOR JULY 31, 1974
LEGEND
1--AMMONIA 0.001 PPM
2--SULFUR DIOXIDE 0.040 PPM
3--CARBON MONOXIDE 4.000 PPM
4--METHANE 3.000 PPMC

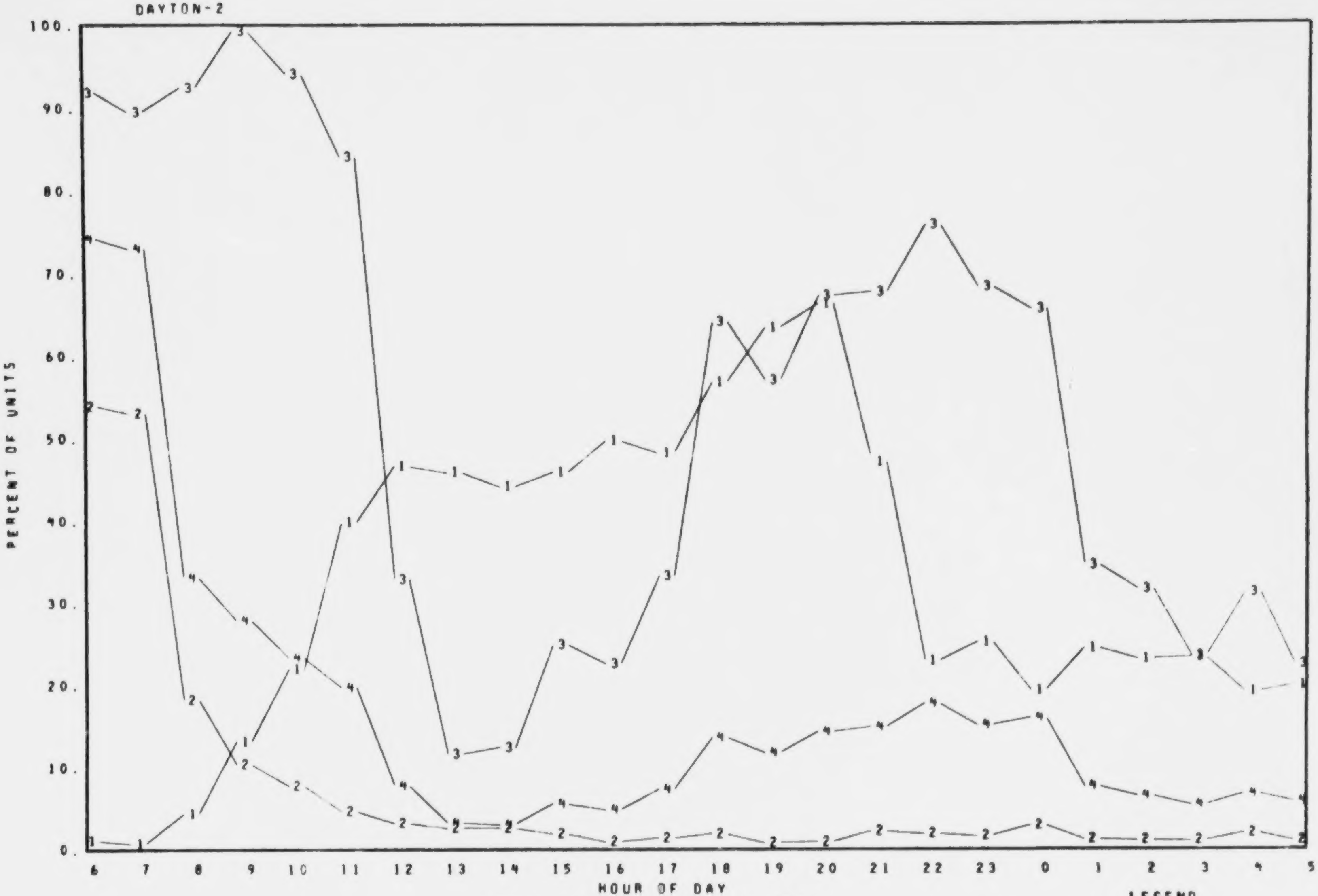


GRAPH 5 FOR JULY 31, 1974

LEGEND
1--GLOBAL IRRADIANCE 2.000 CAL/SQ.CM/MIN
2--WIND SPEED 20.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE HUMIDITY 80.000 PERCENT

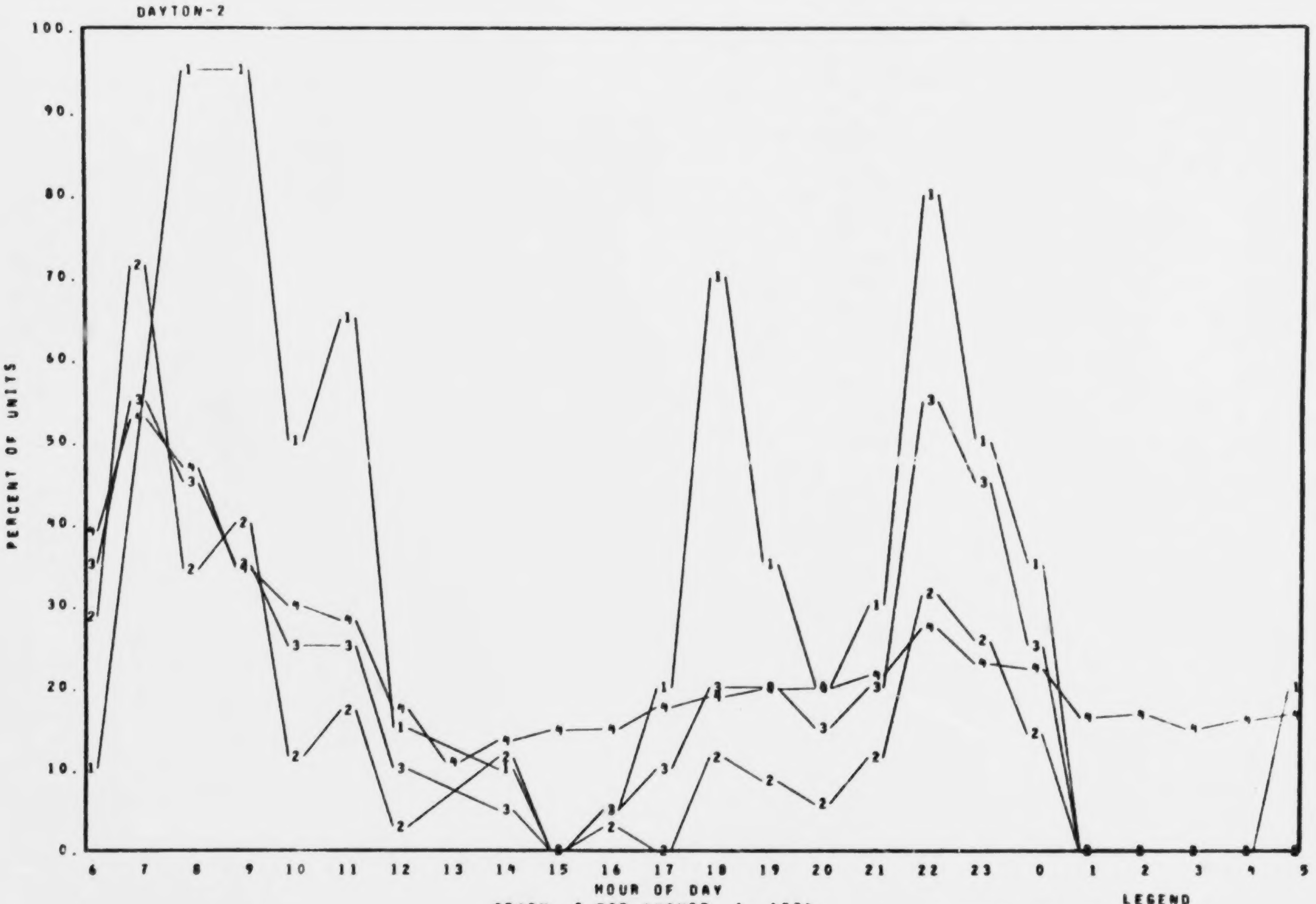

DAYTON-2 JULY 31, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350. 300. 250. 200. 150. 100. 50. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5


DAYTON-2
PERCENT OF UNITS
0.
10.
20.
30.
40.
50.
60.
70.
80.
90.
100.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5
HOUR OF DAY
GRAPH 1 FOR AUGUST 1, 1974
LEGEND
1--PAN 0.005 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 4.000 (10**-4)/M
4--OZONE 0.200 PPM



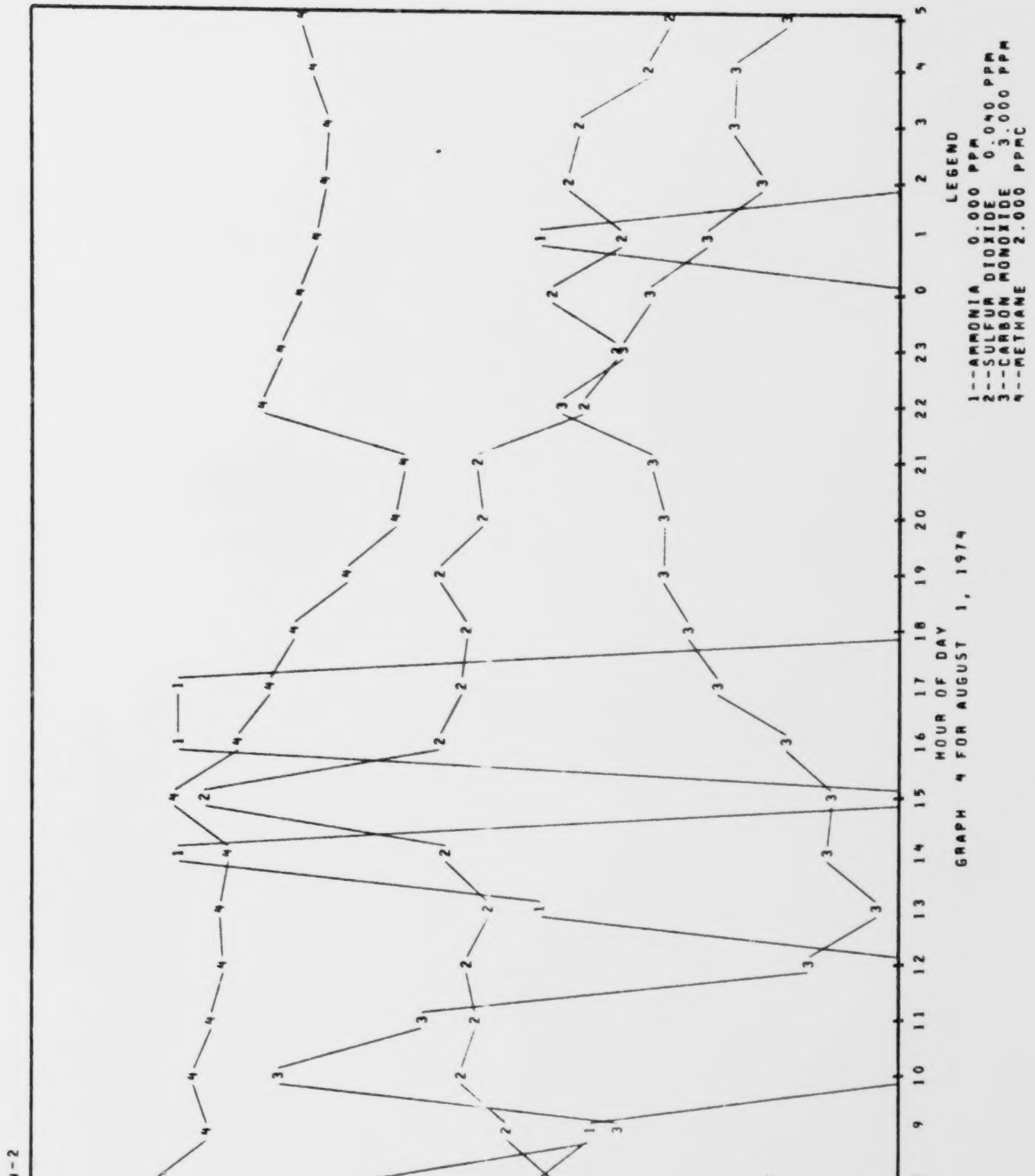
GRAPH 2 FOR AUGUST 1, 1974

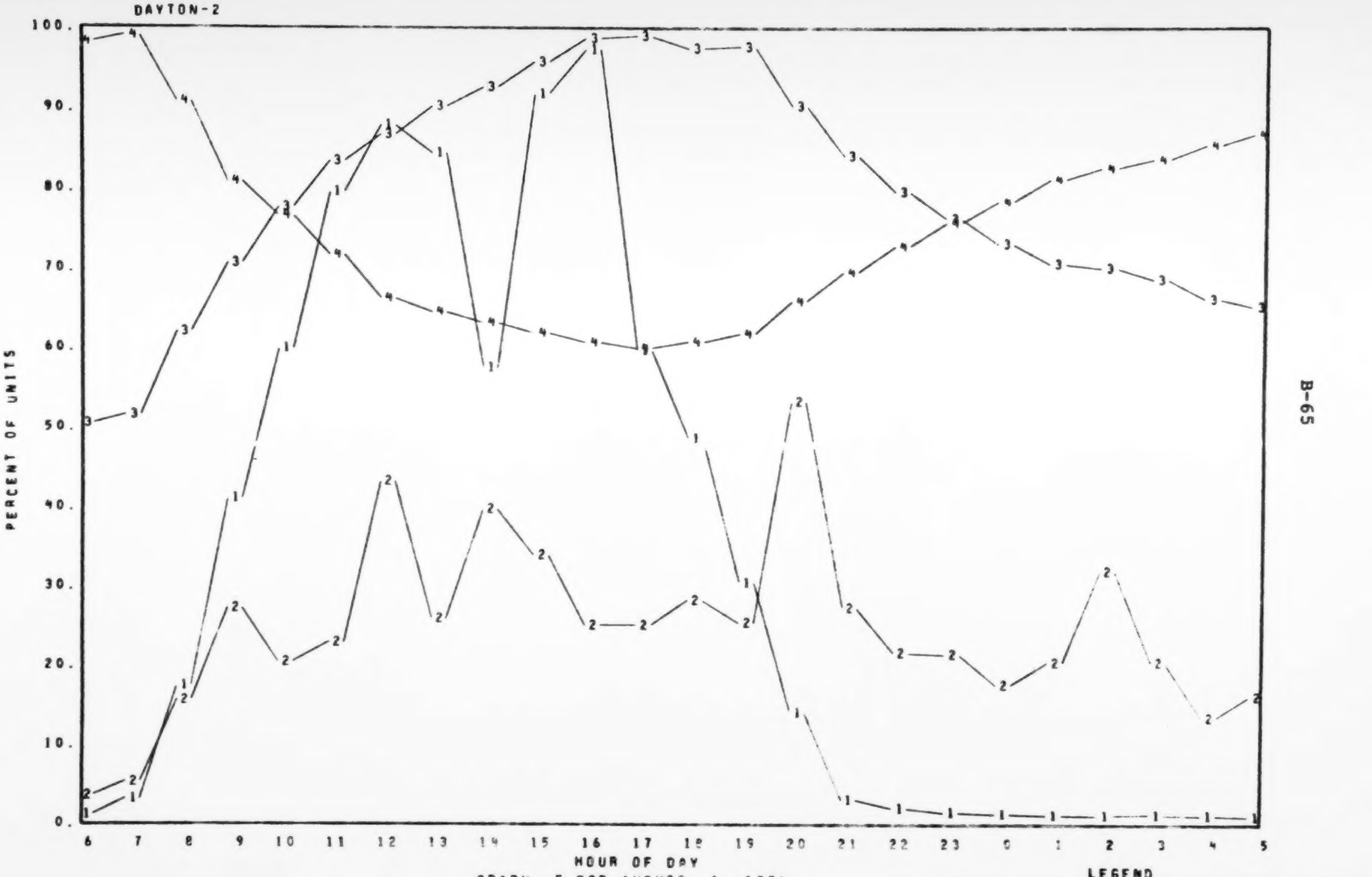
LEGEND
1--OZONE 0.200 PPM
2--NITRIC OXIDE 0.200 PPM
3--NITROGEN DIOXIDE 0.040 PPM
4--NITROGEN OXIDES 0.200 PPM



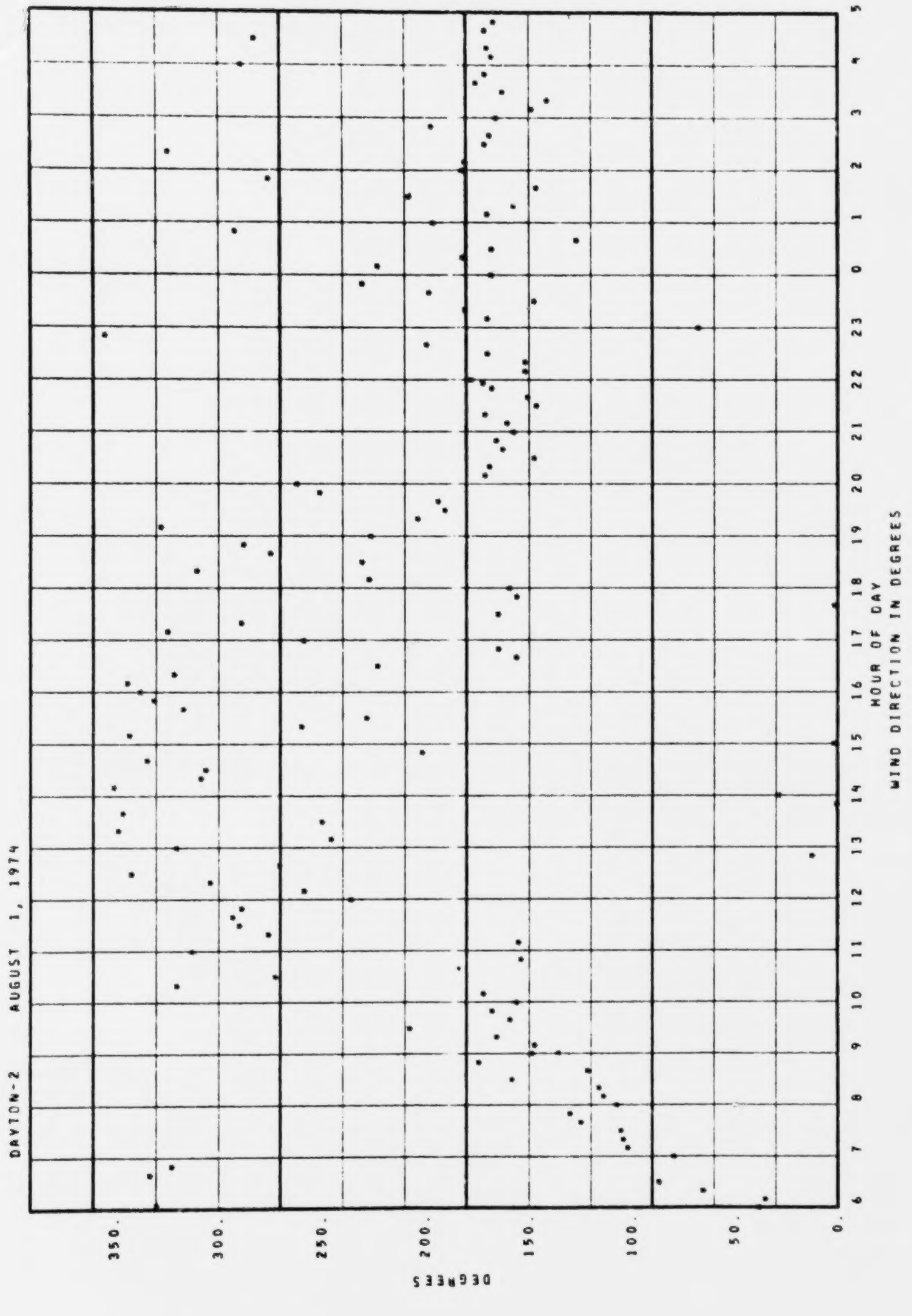
GRAPH 3 FOR AUGUST 1, 1974

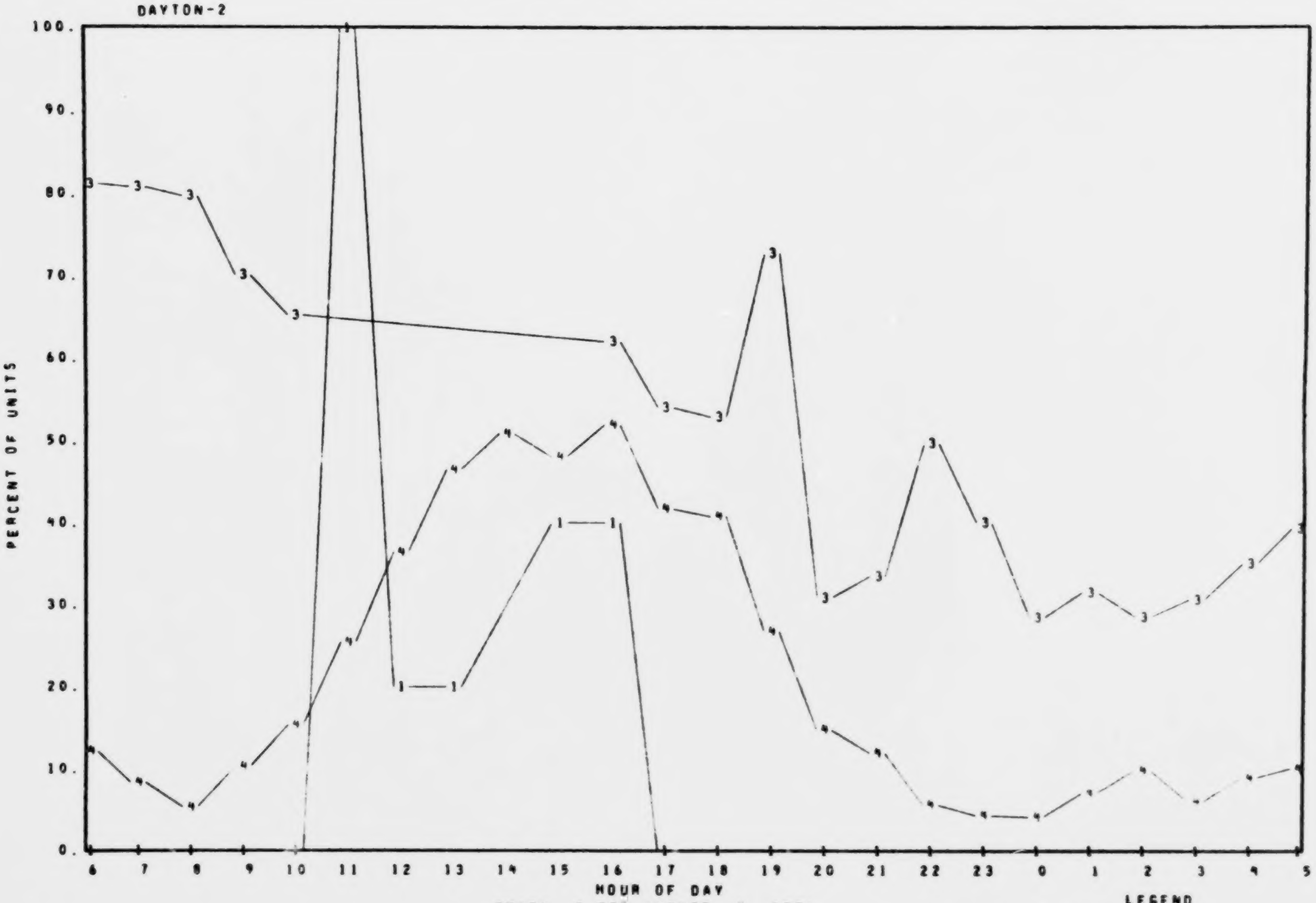
LEGEND
1--ETHYLENE 0.020 PPMC
2--ACETYLENE 0.020 PPMC
3--ETHANE 0.020 PPMC
4--NON-METHANE HYDROCARBON 2.000 PPMC


DAYTON-2
PERCENT OF UNITS
HOUR OF DAY
GRAPH 4 FOR AUGUST 1, 1974
LEGEND
1--AMMONIA 0.000 PPM
2--SULFUR DIOXIDE 0.040 PPM
3--CARBON MONOXIDE 3.000 PPM
4--METHANE 2.000 PPMC



GRAPH 5 FOR AUGUST 1, 1974

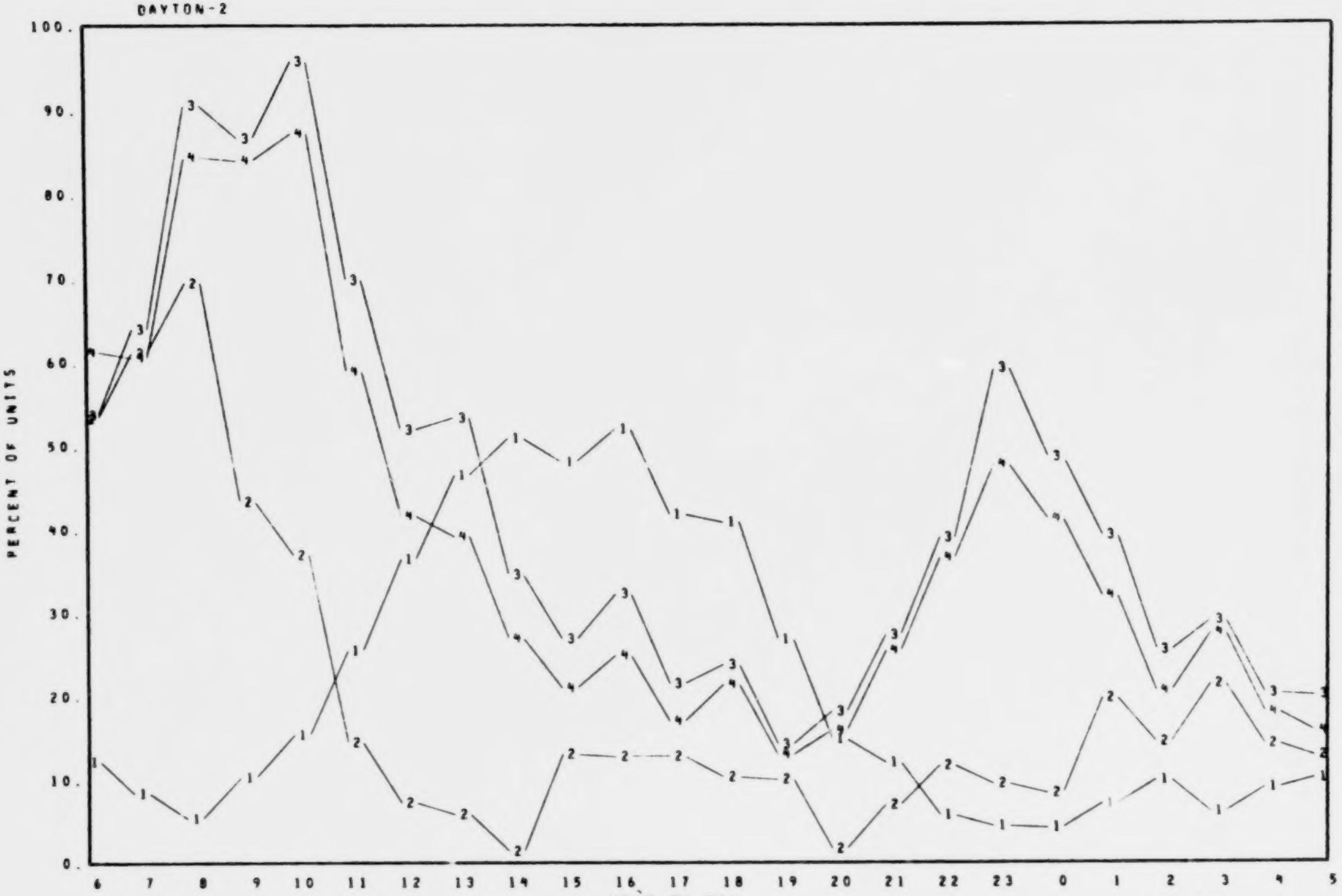

DAYTON-2
AUGUST 1, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5



GRAPH 1 FOR AUGUST 2, 1974

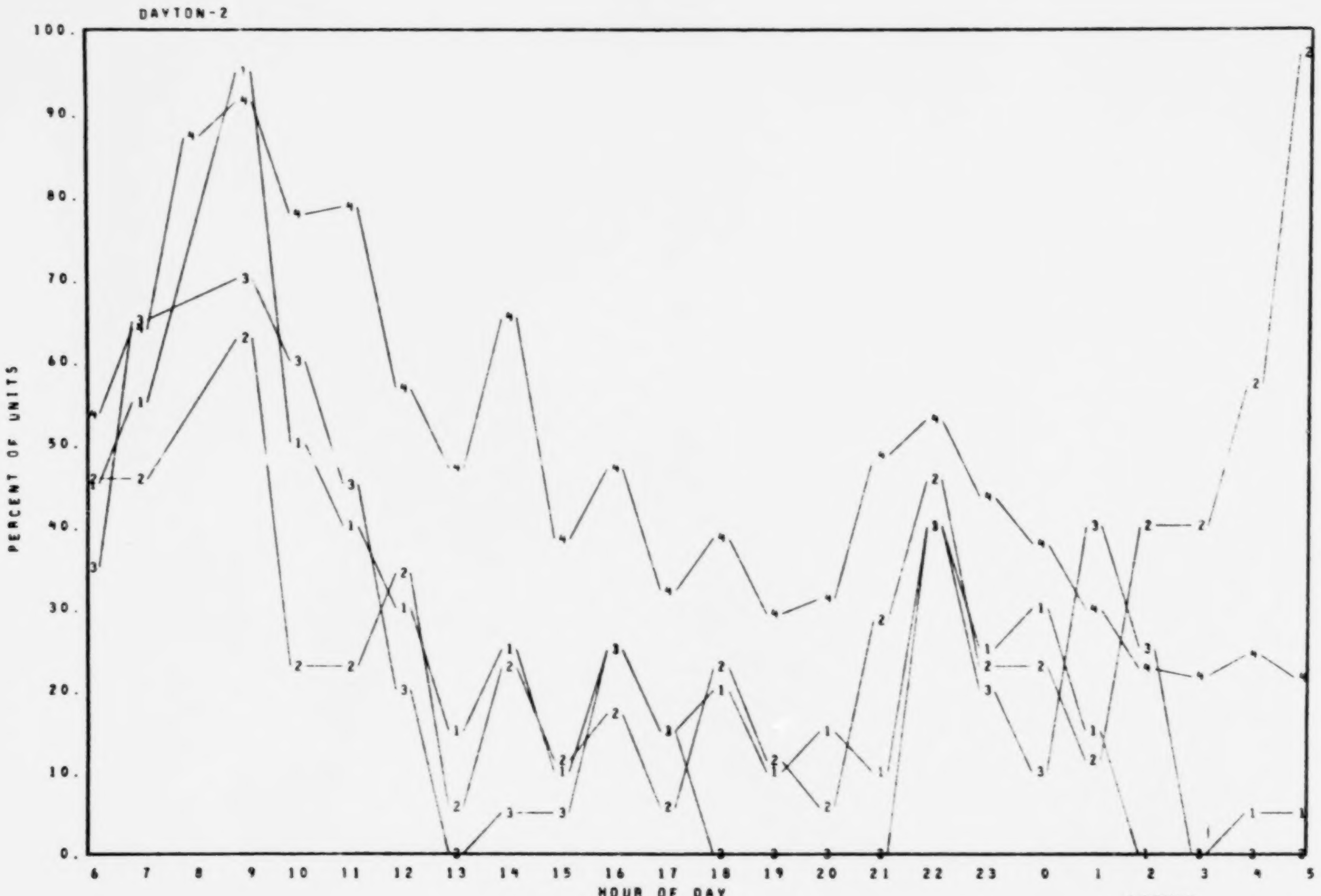
LEGEND

1--PAN 0.005 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 5.005 (10**-4)/M
4--OZONE 0.200 PPM



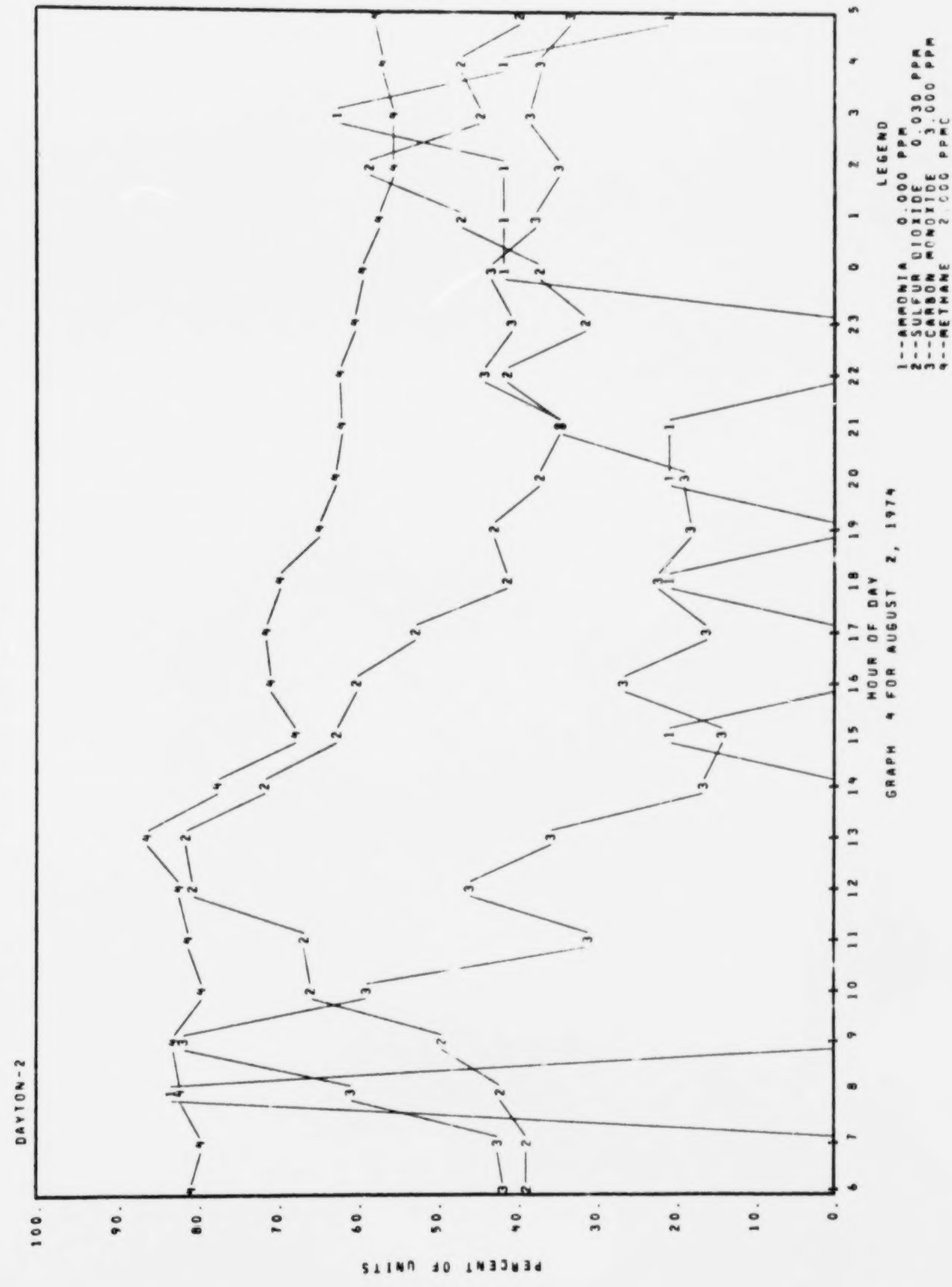
GRAPH 2 FOR AUGUST 2, 1974

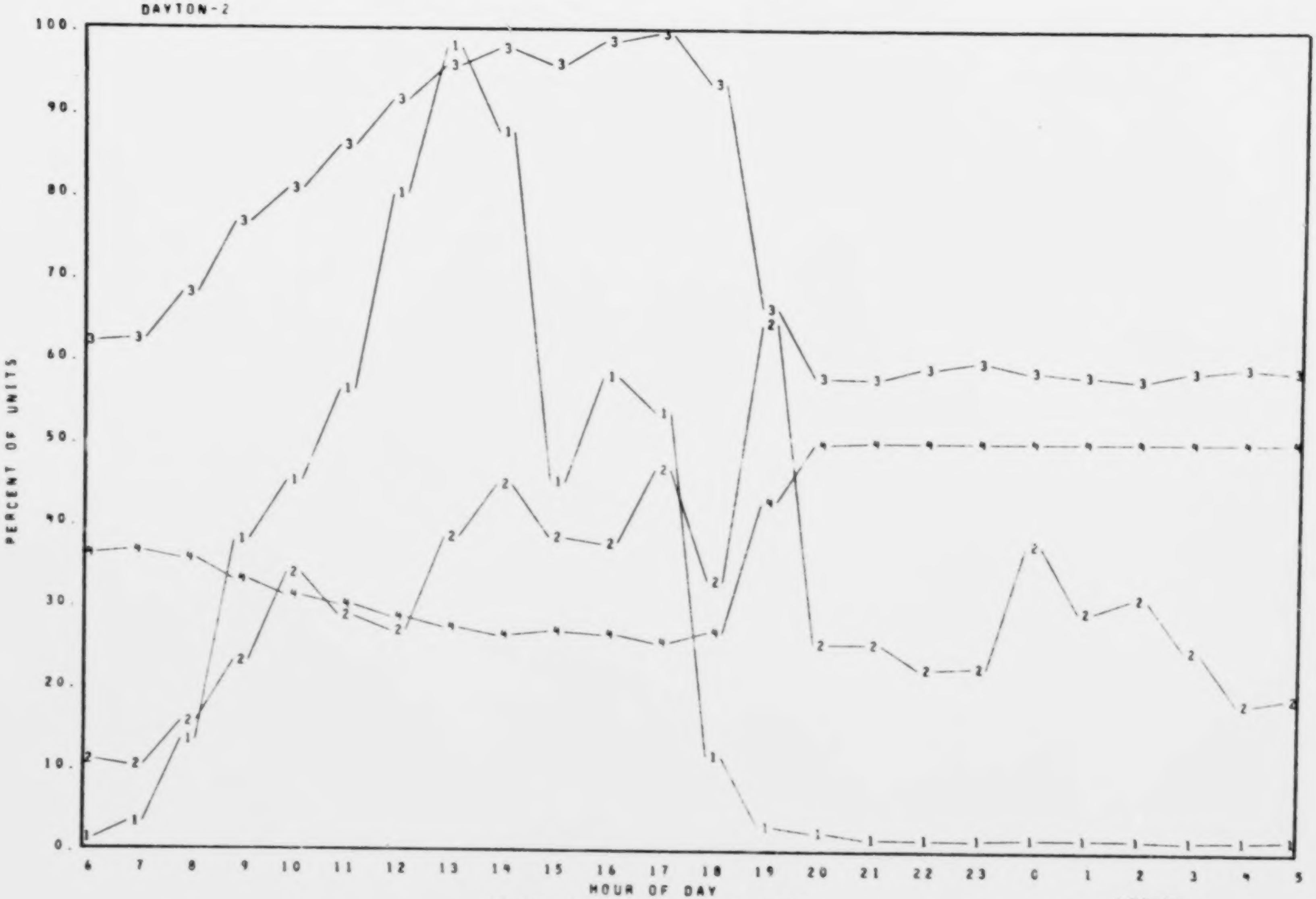
LEGEND
1--OZONE 0.200 PPM
2--NITRIC OXIDE 0.030 PPM
3--NITROGEN DIOXIDE 0.040 PPM
4--NITROGEN OXIDES 0.060 PPM



GRAPH 3 FOR AUGUST 2, 1974

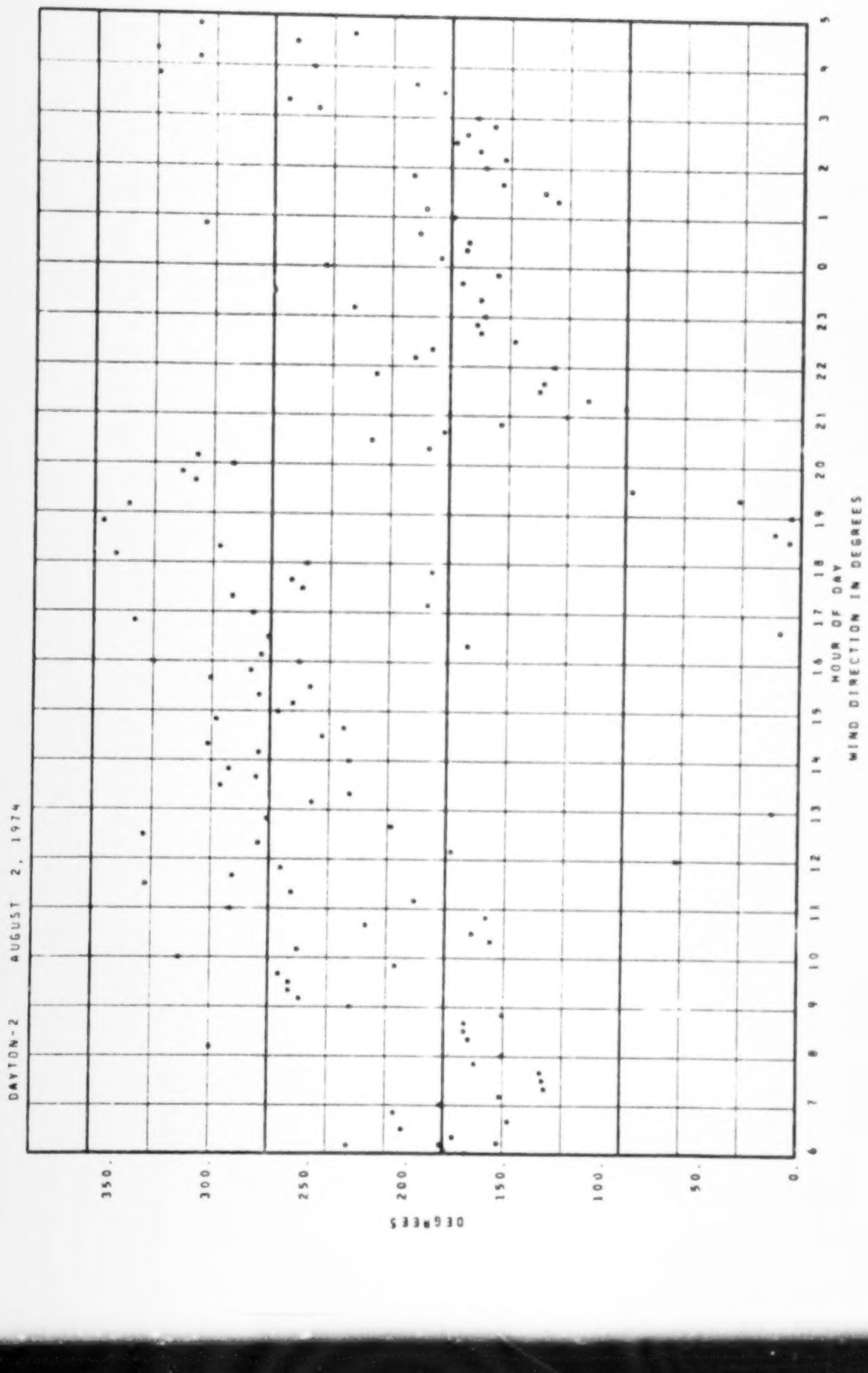
LEGEND
1--ETHYLENE 0.020 PPMC
2--ACETYLENE 0.010 PPMC
3--ETHANE 0.020 PPMC
4--NON-METHANE HYDROCARBON 0.900 PPMC

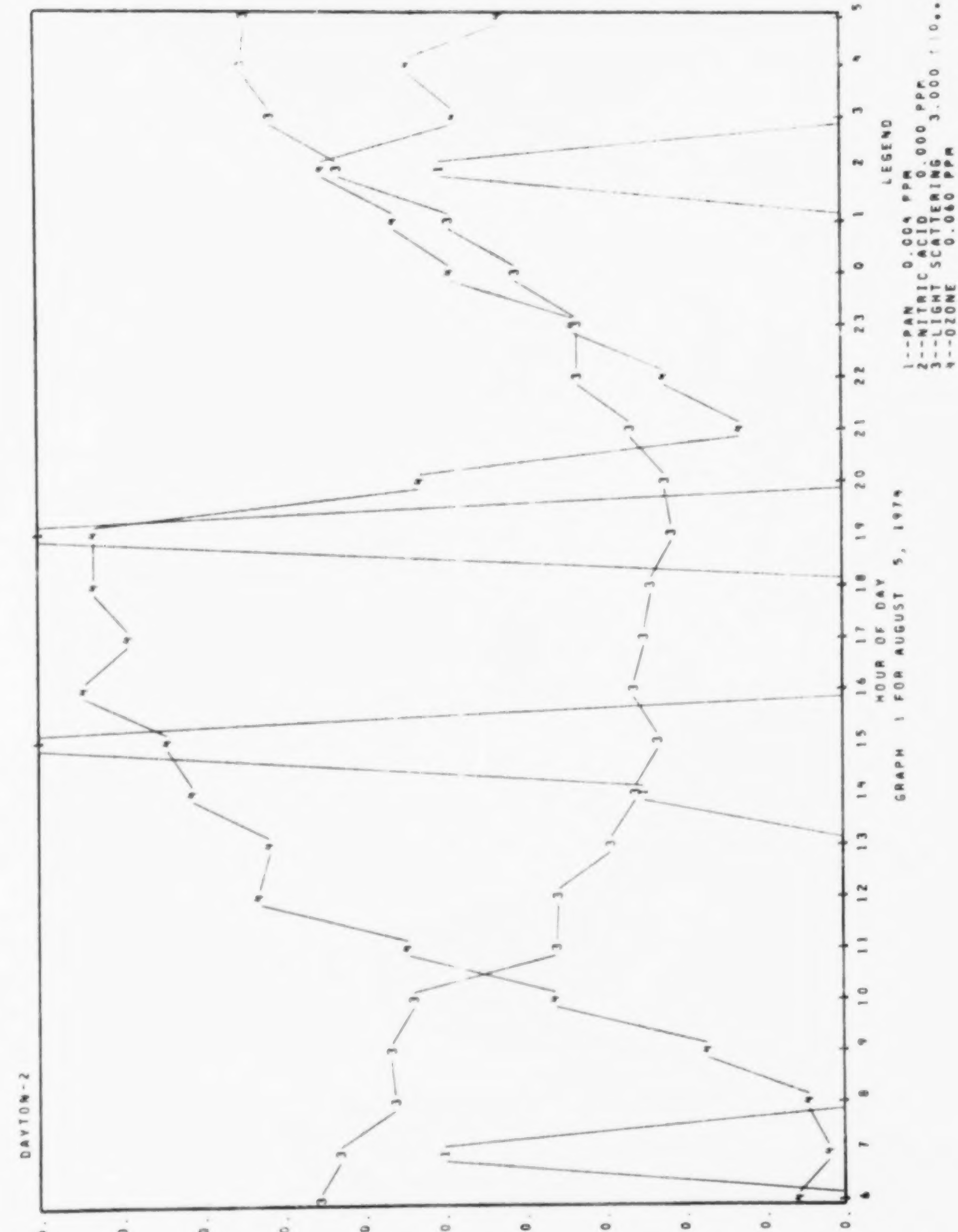

DAYTON-2
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 4 FOR AUGUST 2, 1974
LEGEND
1--AMMONIA 0.000 PPM
2--SULFUR DIOXIDE 0.030 PPM
3--CARBON MONOXIDE 3.000 PPM
4--METHANE 2.000 PPMC

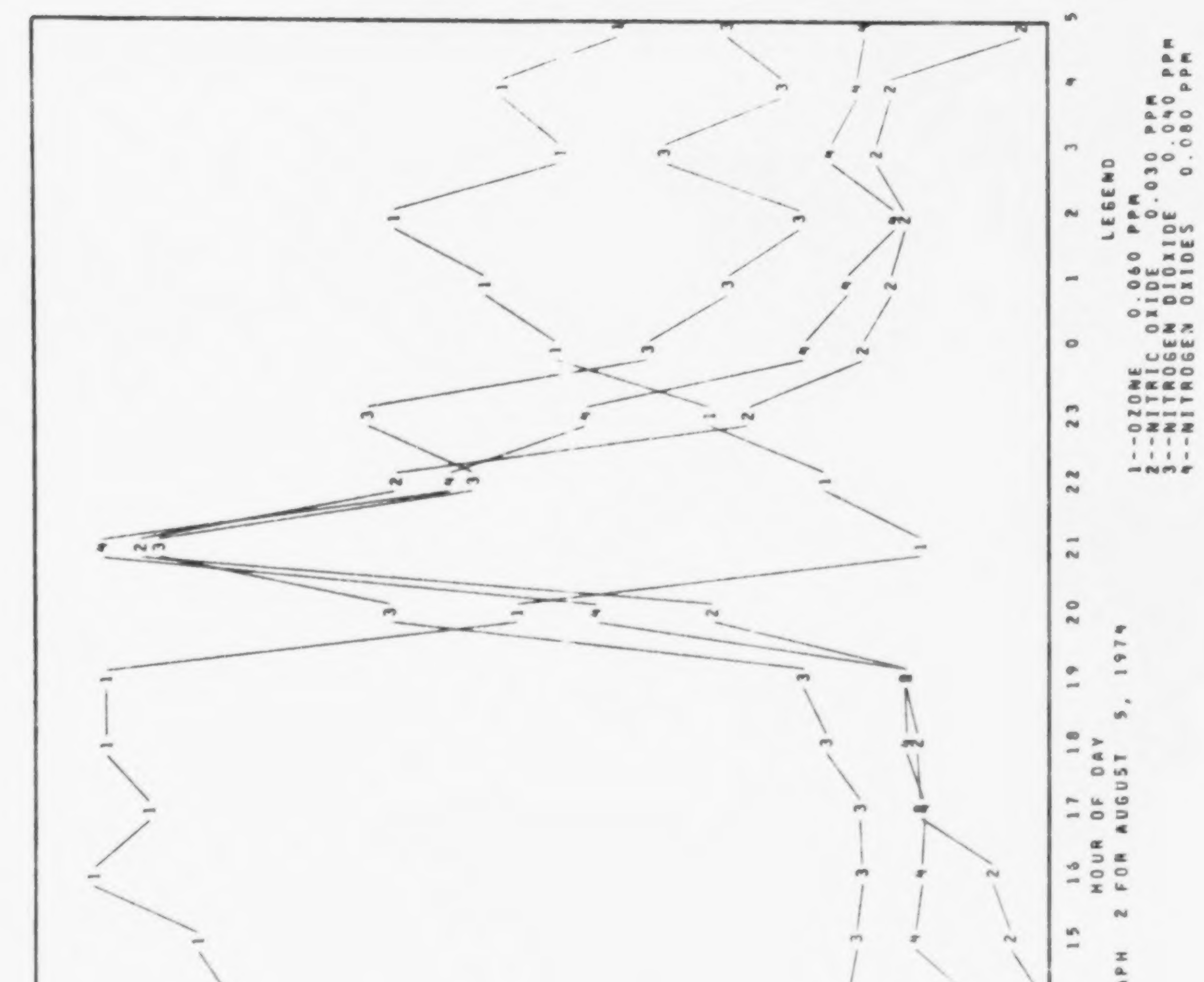


GRAPH 5 FOR AUGUST 2, 1974

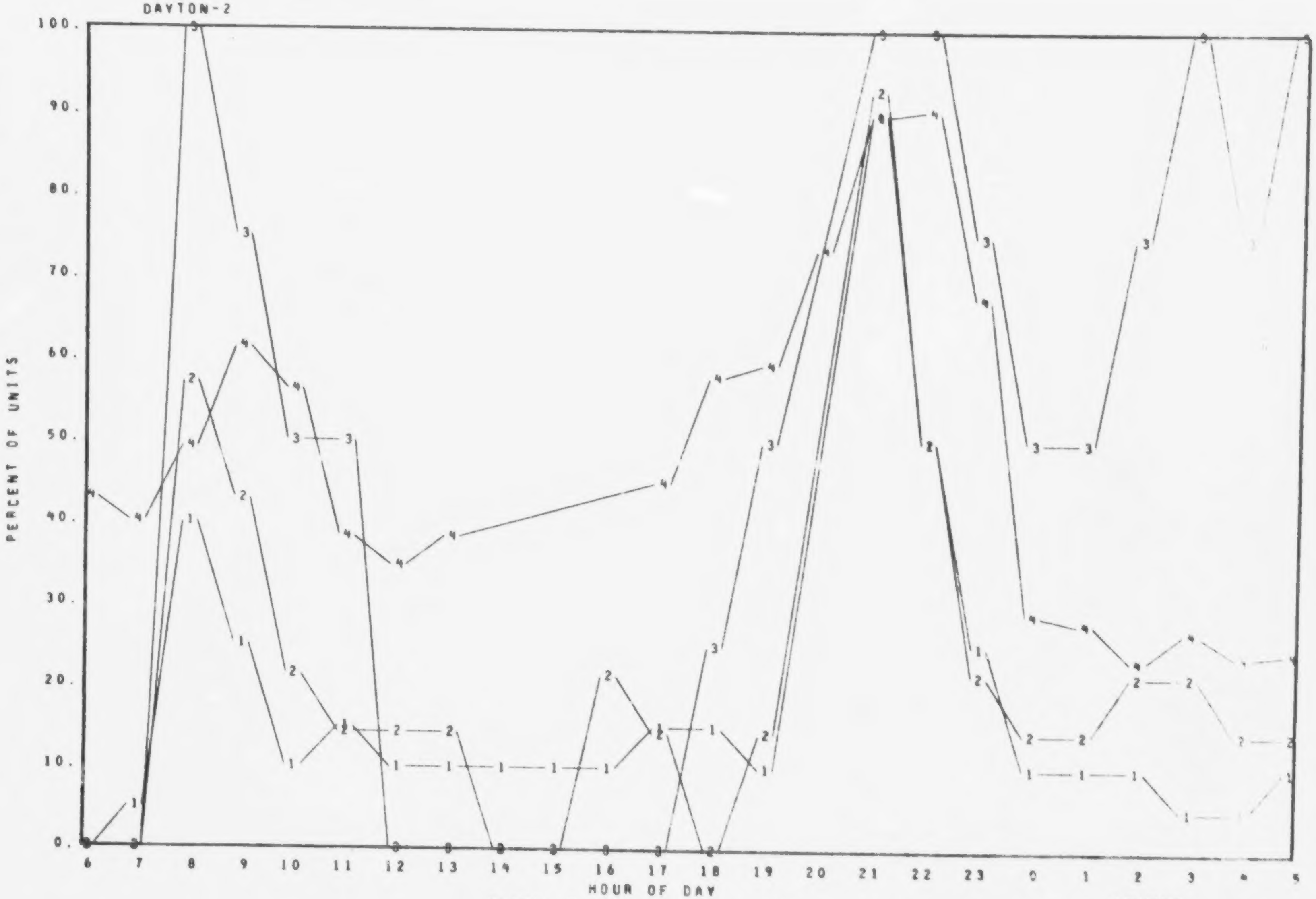
LEGEND
1--GLOBAL IRRADIANCE 0.900 CAL/SQ.CM/MIN
2--WIND SPEED 20.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE HUMIDITY 200.000 PERCENT


DAYTON-2
AUGUST 2, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5


DAYTON-2
PERCENT OF UNITS
HOUR OF DAY
GRAPH 1 FOR AUGUST 5, 1974
LEGEND
1--PAN 0.004 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 3.000
4--OZONE 0.060 PPM

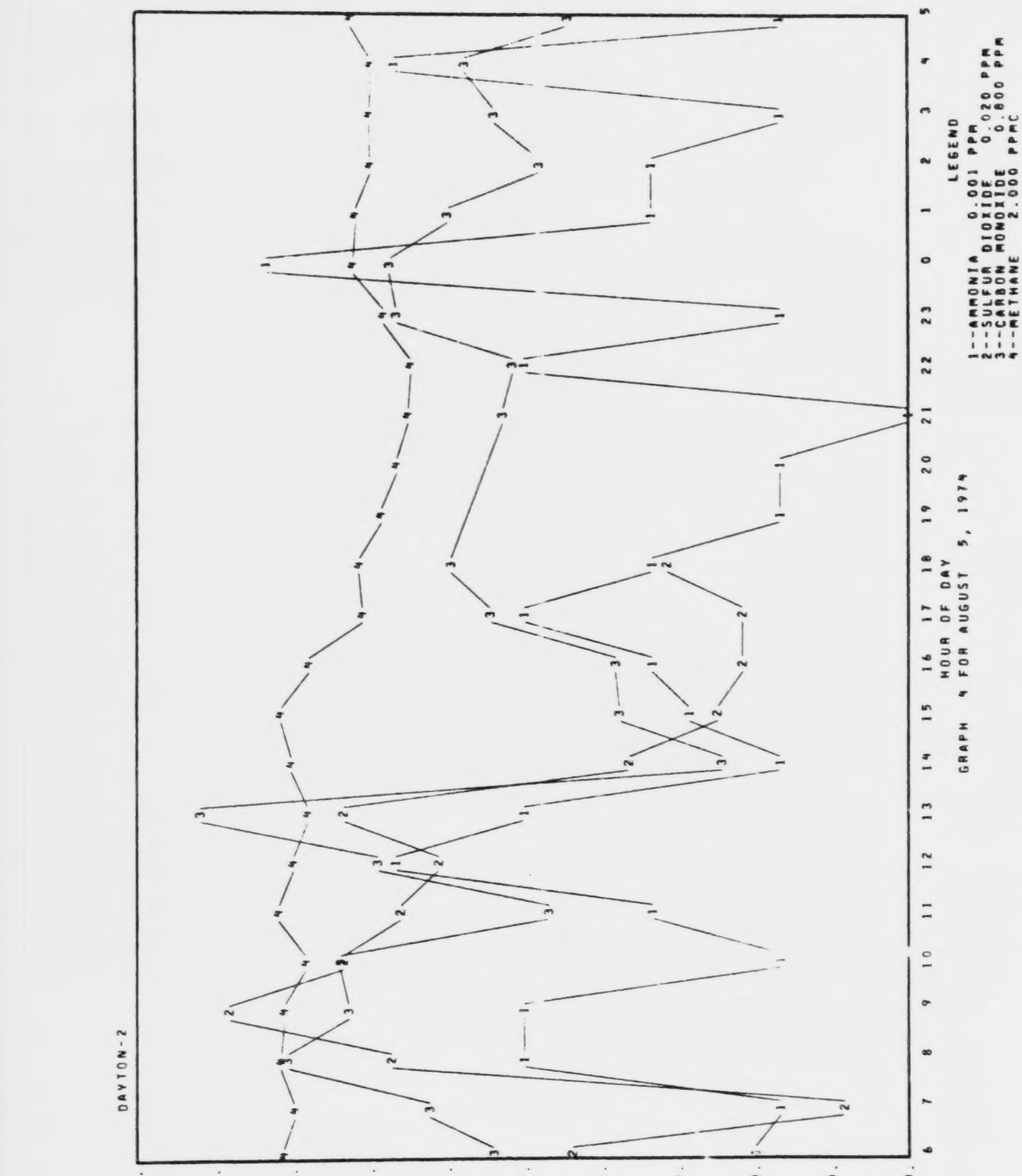


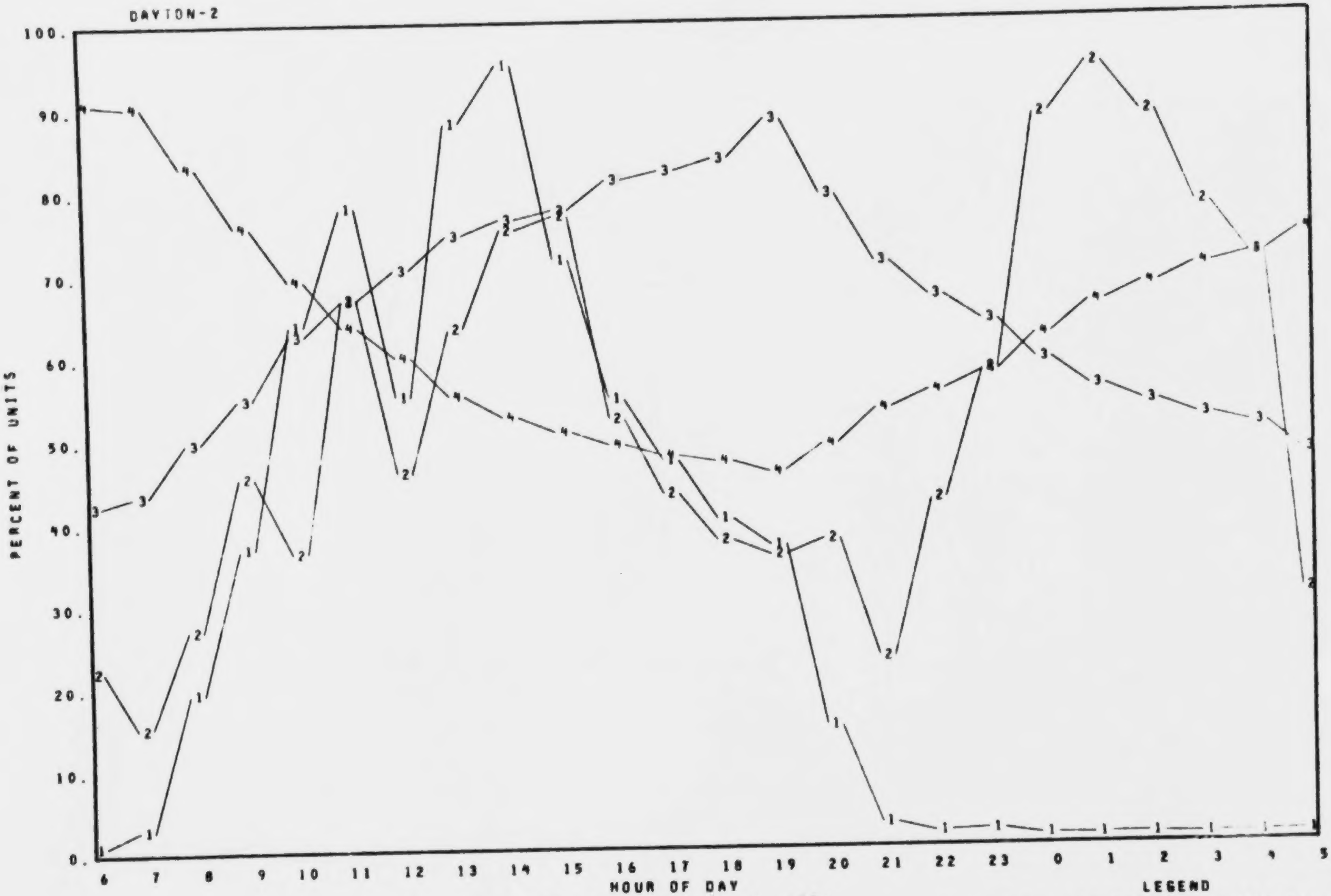
GRAPH 2 FOR AUGUST 5, 1974



GRAPH 3 FOR AUGUST 5, 1974

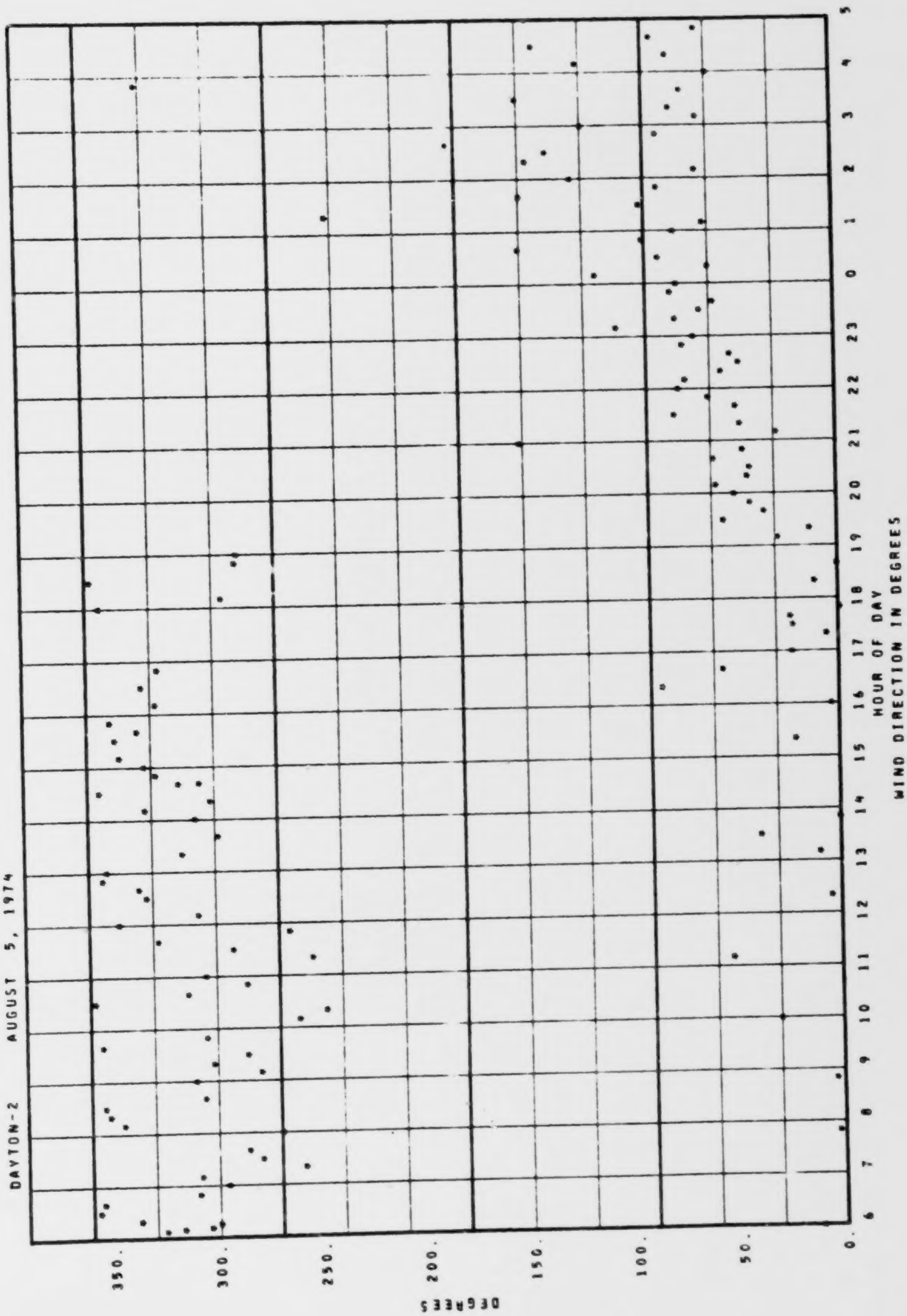
LEGEND
1--ETHYLENE 0.020 PPMC
2--ACETYLENE 0.008 PPMC
3--ETHANE 0.004 PPMC
4--NON-METHANE HYDROCARBON 0.800 PPMC


DAYTON-2
PERCENT OF UNITS
HOUR OF DAY
GRAPH 4 FOR AUGUST 5, 1974
LEGEND
1--AMMONIA 0.001 PPM
2--SULFUR DIOXIDE 0.020 PPM
3--CARBON MONOXIDE 0.800 PPM
4--METHANE 2.000 PPMC

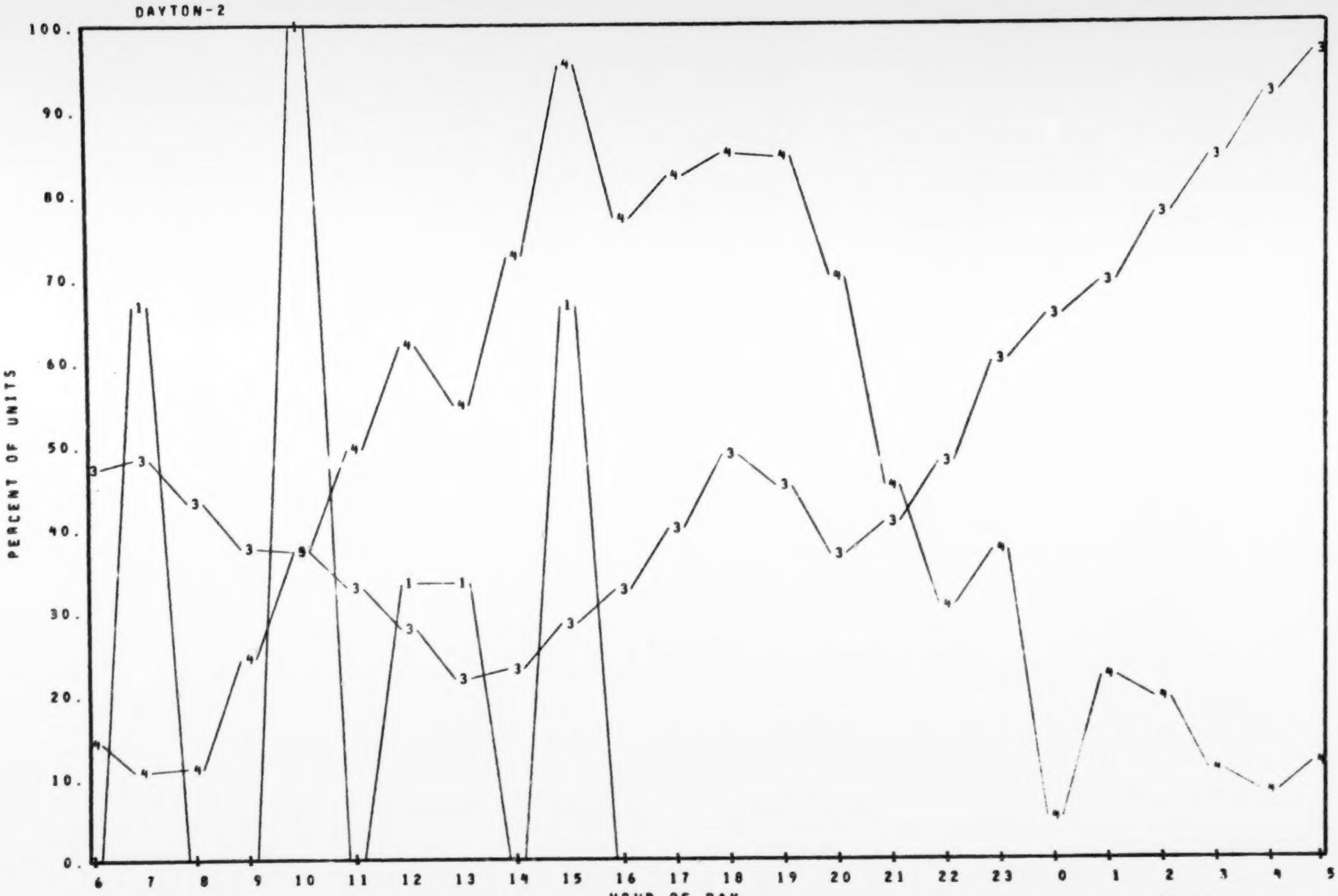


GRAPH 5 FOR AUGUST 5, 1974

LEGEND
1--GLOBAL IRRADIANCE 1.000 CAL/SQ.CM/MIN
2--WIND SPEED 9.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE HUMIDITY 100.000 PERCENT



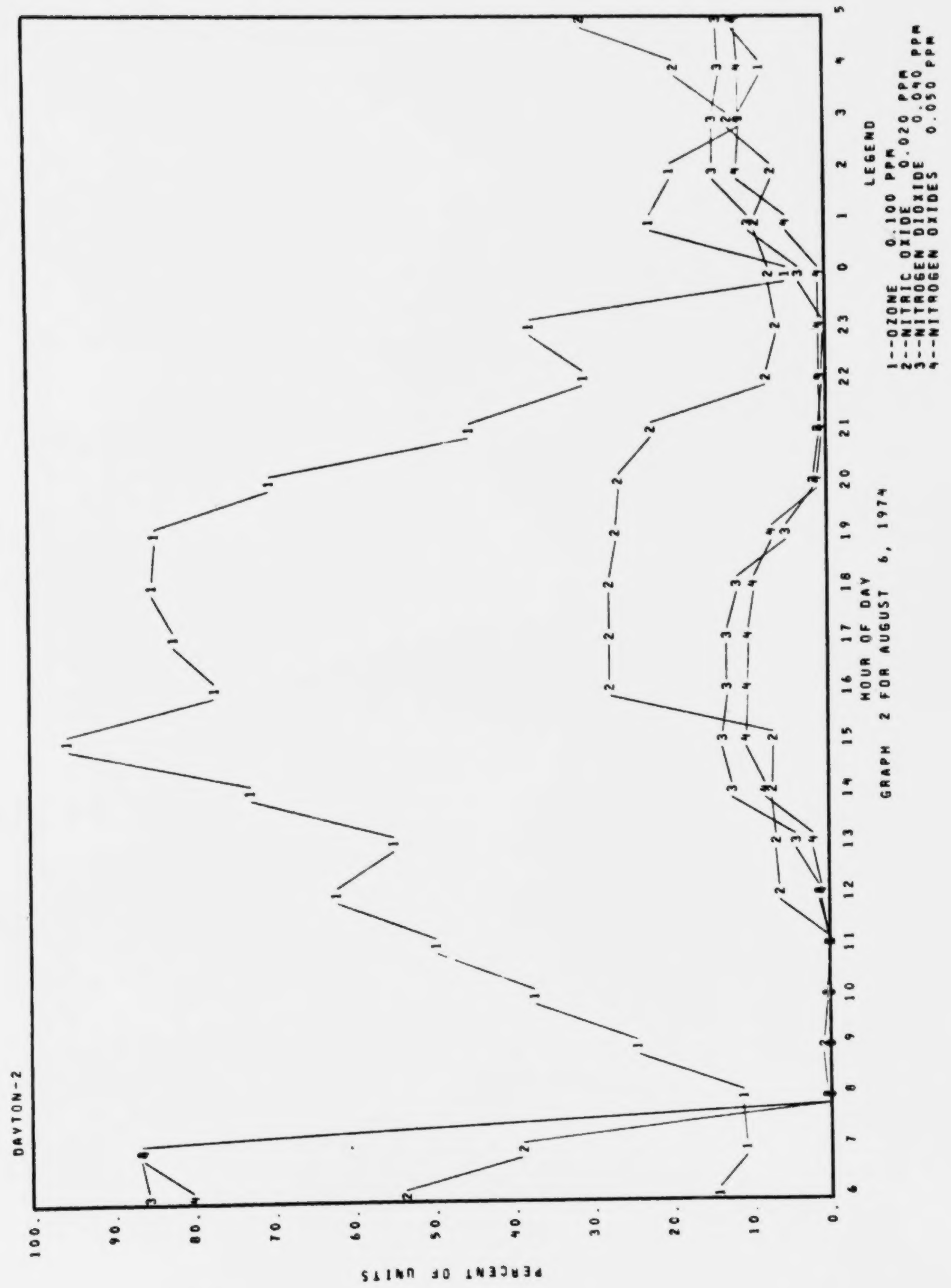
DAYTON-2 AUGUST 5, 1974
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
WIND DIRECTION IN DEGREES
350. 300. 250. 200. 150. 100. 50. 0.
DEGREES



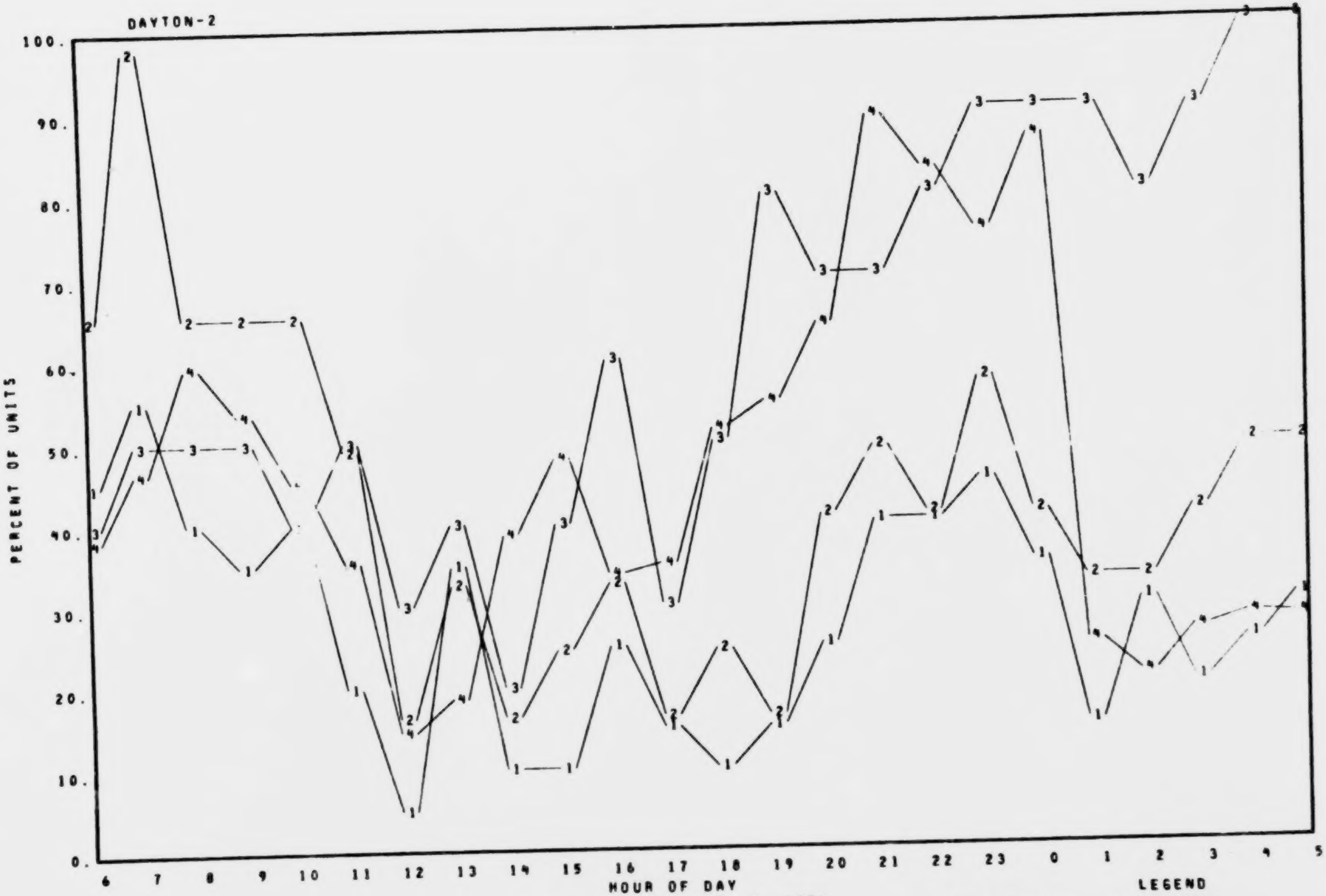
GRAPH 1 FOR AUGUST 6, 1974

LEGEND

1--PAN 0.003 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 5.000 (10..-4)/M
4--OZONE 0.100 PPM

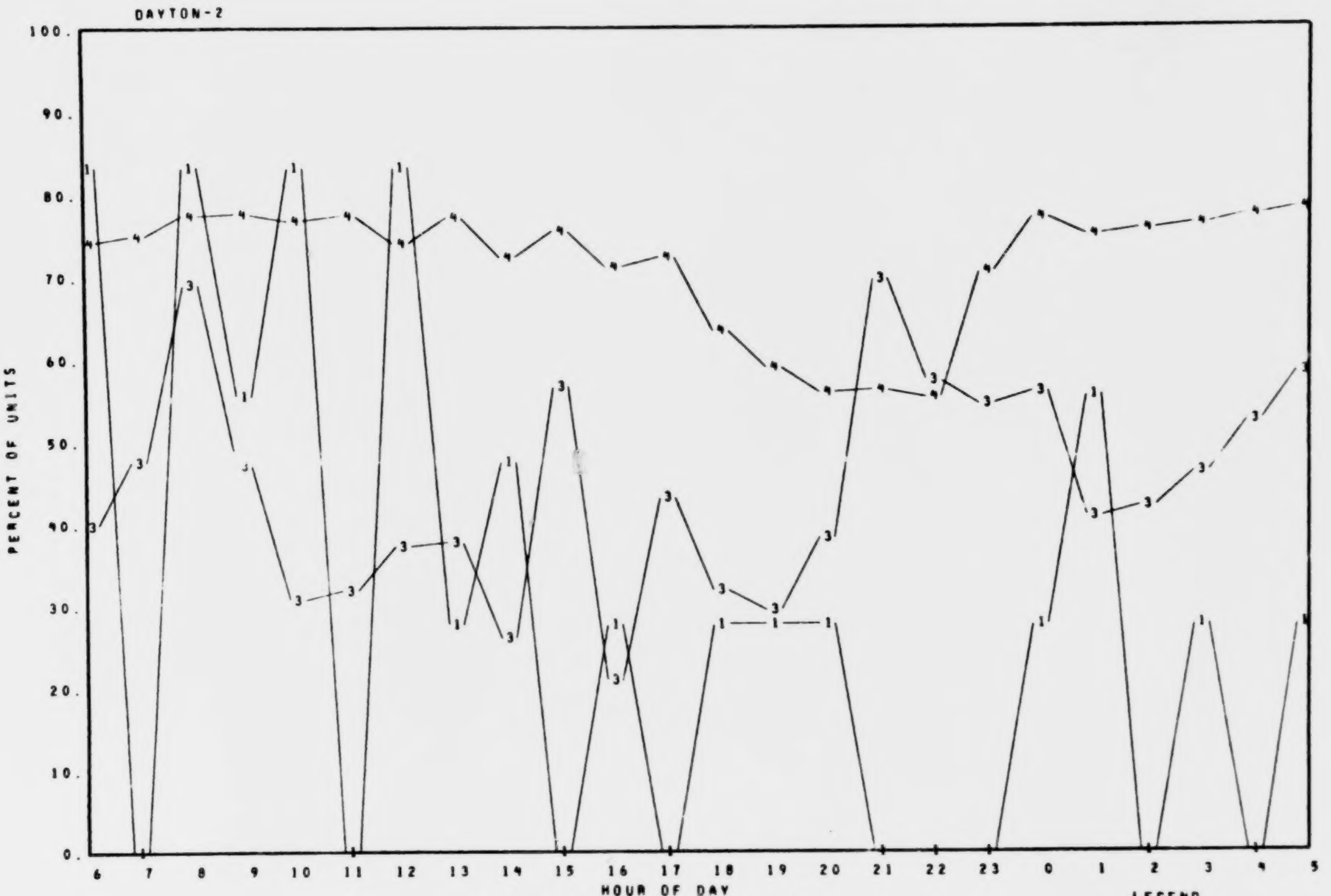


GRAPH 2 FOR AUGUST 6, 1974



GRAPH 3 FOR AUGUST 6, 1974

LEGEND
1--ETHYLENE 0.020 PPMC
2--ACETYLENE 0.007 PPMC
3--ETHANE 0.010 PPMC
4--NON-METHANE HYDROCARBON 0.ECC PPMC



GRAPH 4 FOR AUGUST 6, 1974

LEGEND
1--AMMONIA 0.000 PPM
3--CARBON MONOXIDE 2.000 PPM
4--METHANE 2.000 PPMC

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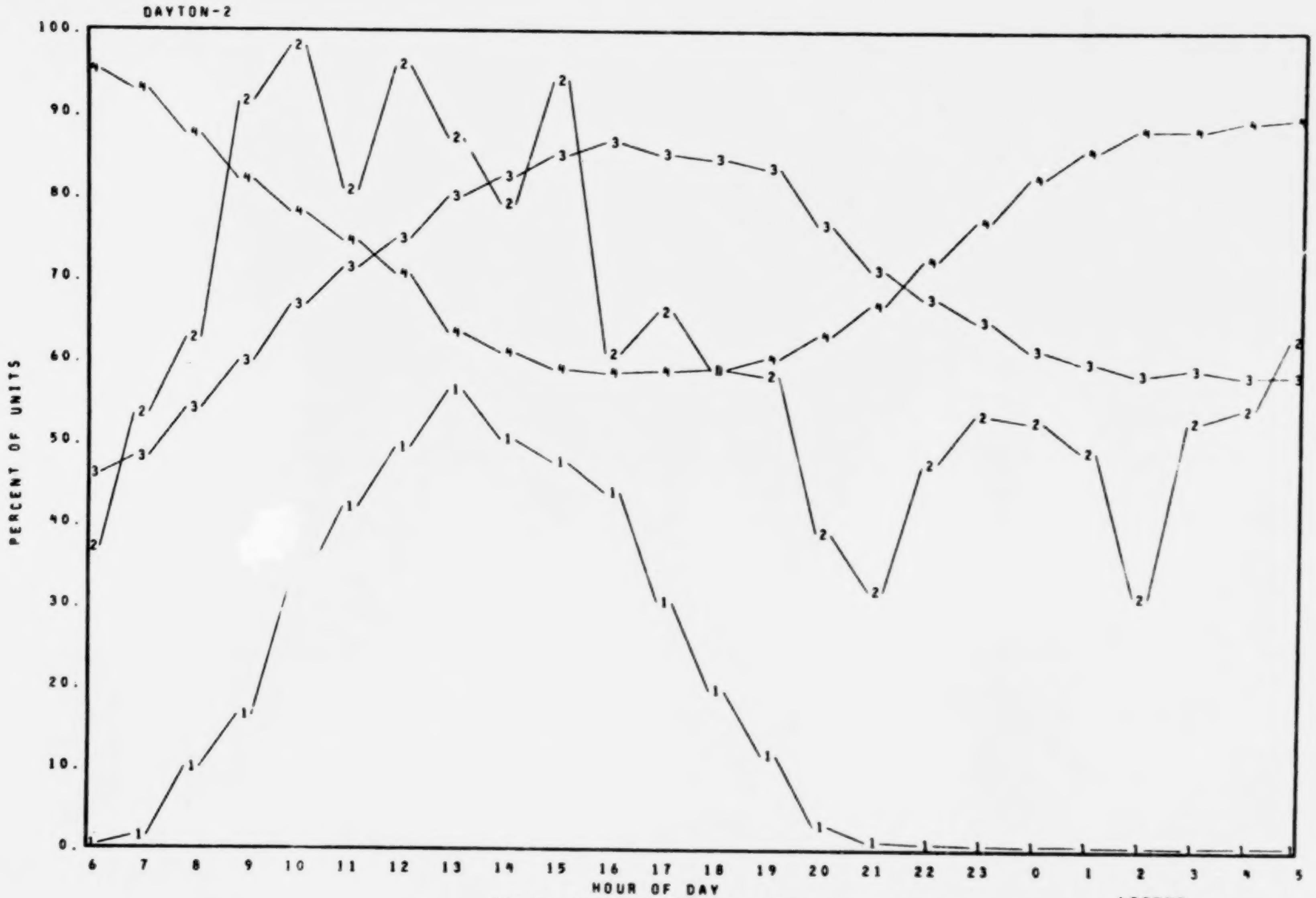
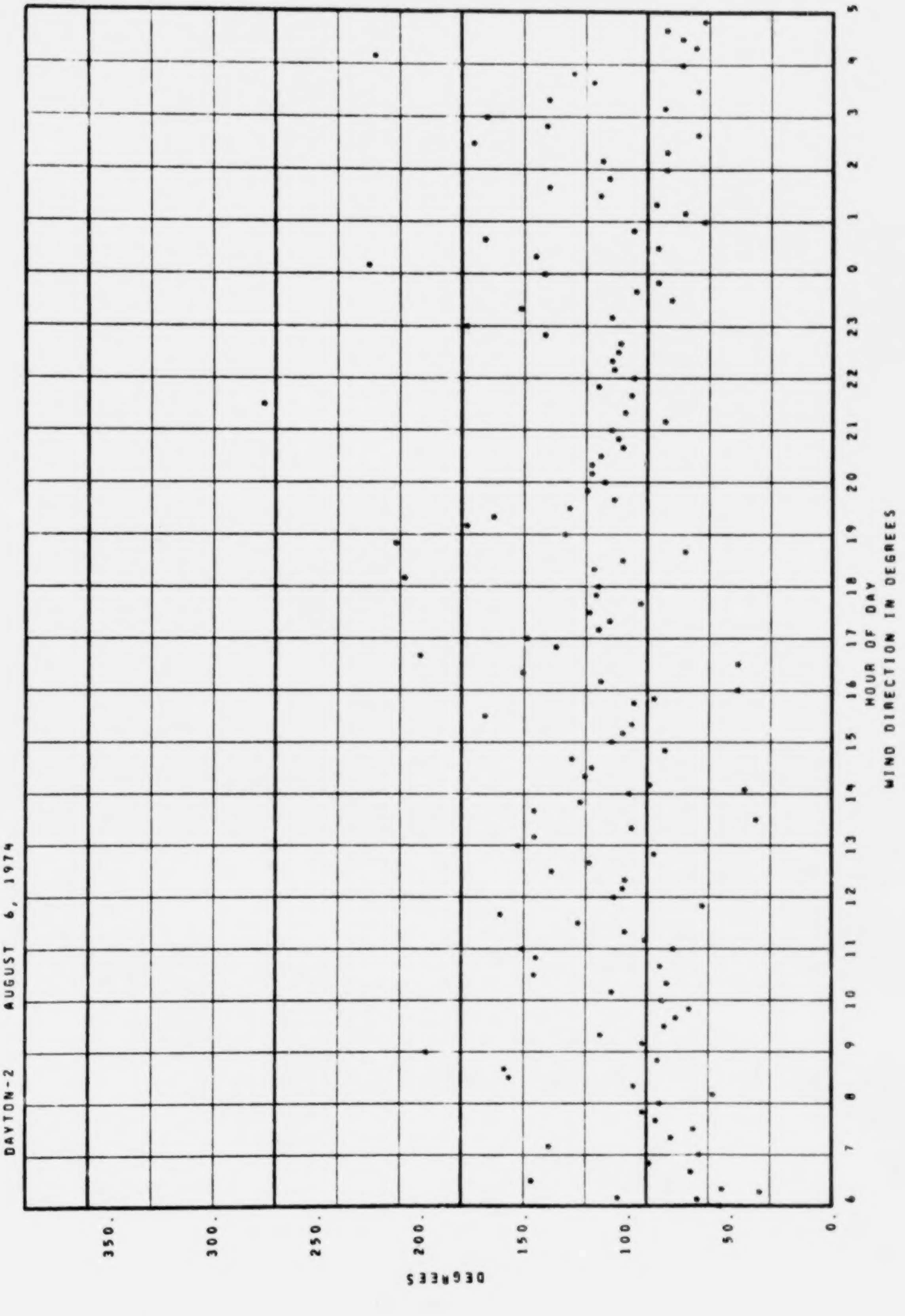
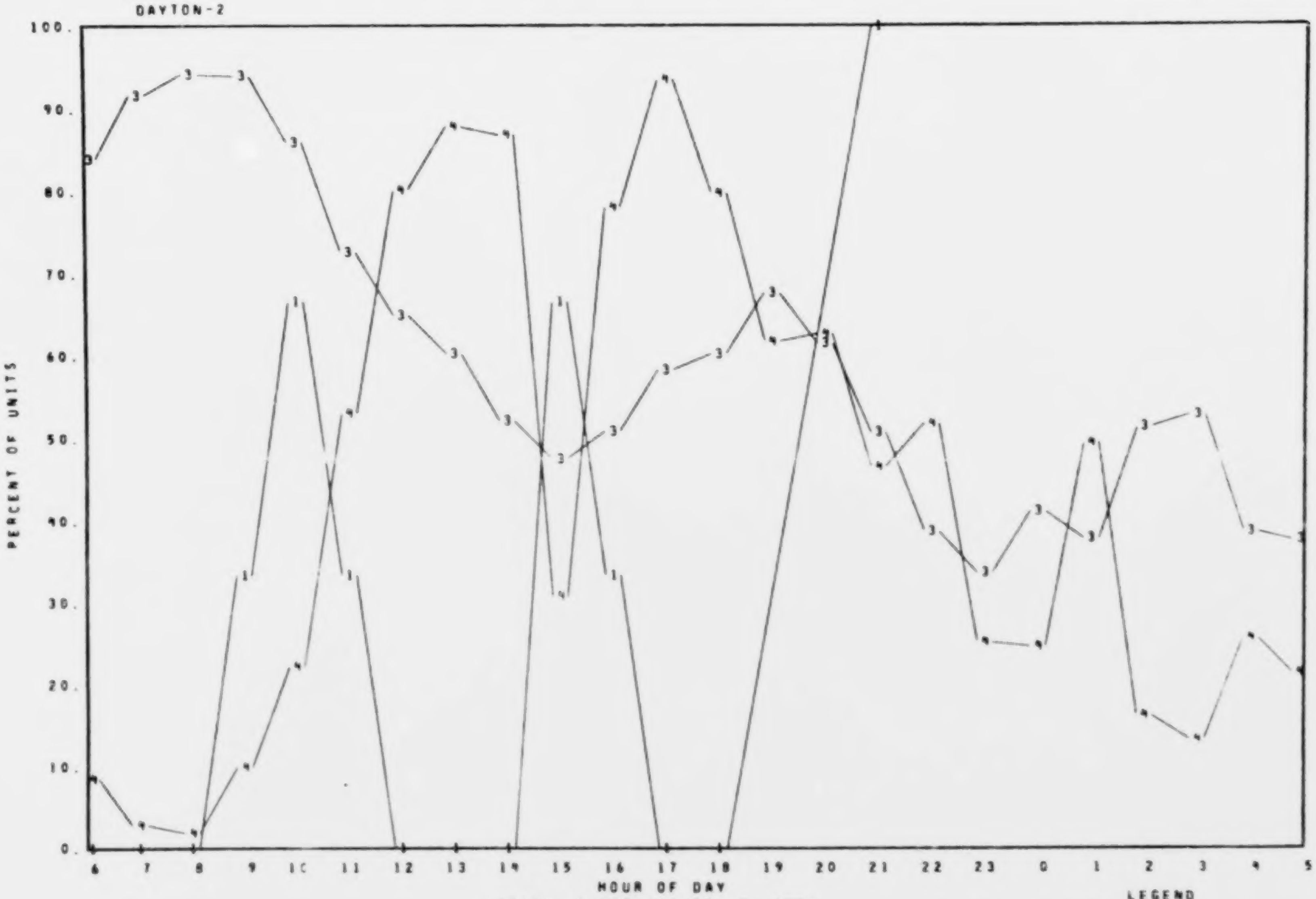


GRAPH 5 FOR AUGUST 6, 1974

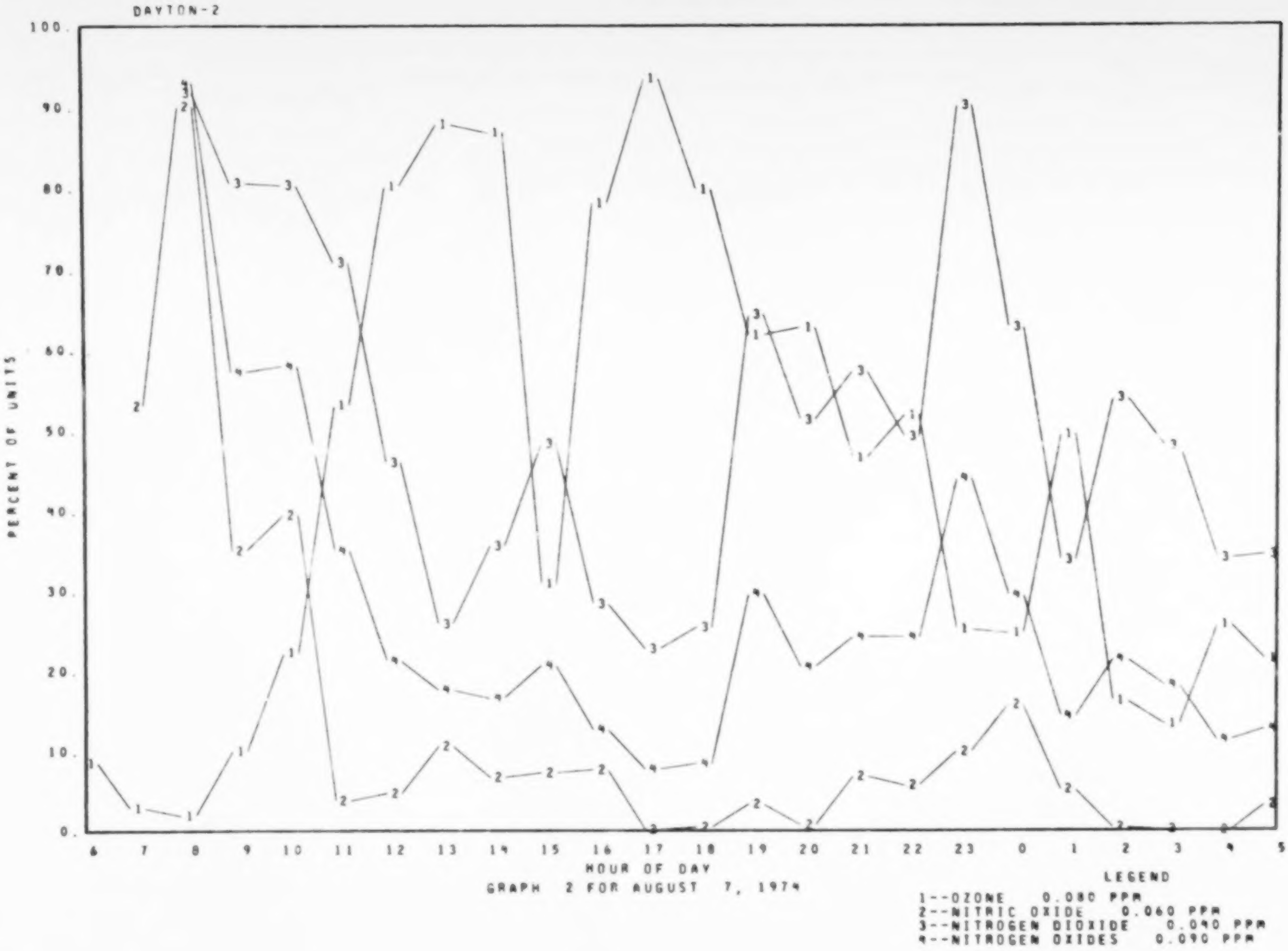
LEGEND
1--GLOBAL IRRADIANCE 2.000 CAL/SQ.CM/MIN
2--WIND SPEED 9.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE HUMIDITY 80.000 PERCENT


DAYTON-2 AUGUST 6, 1974
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
WIND DIRECTION IN DEGREES
350. 300. 250. 200. 150. 100. 50. 0.
DEGREES

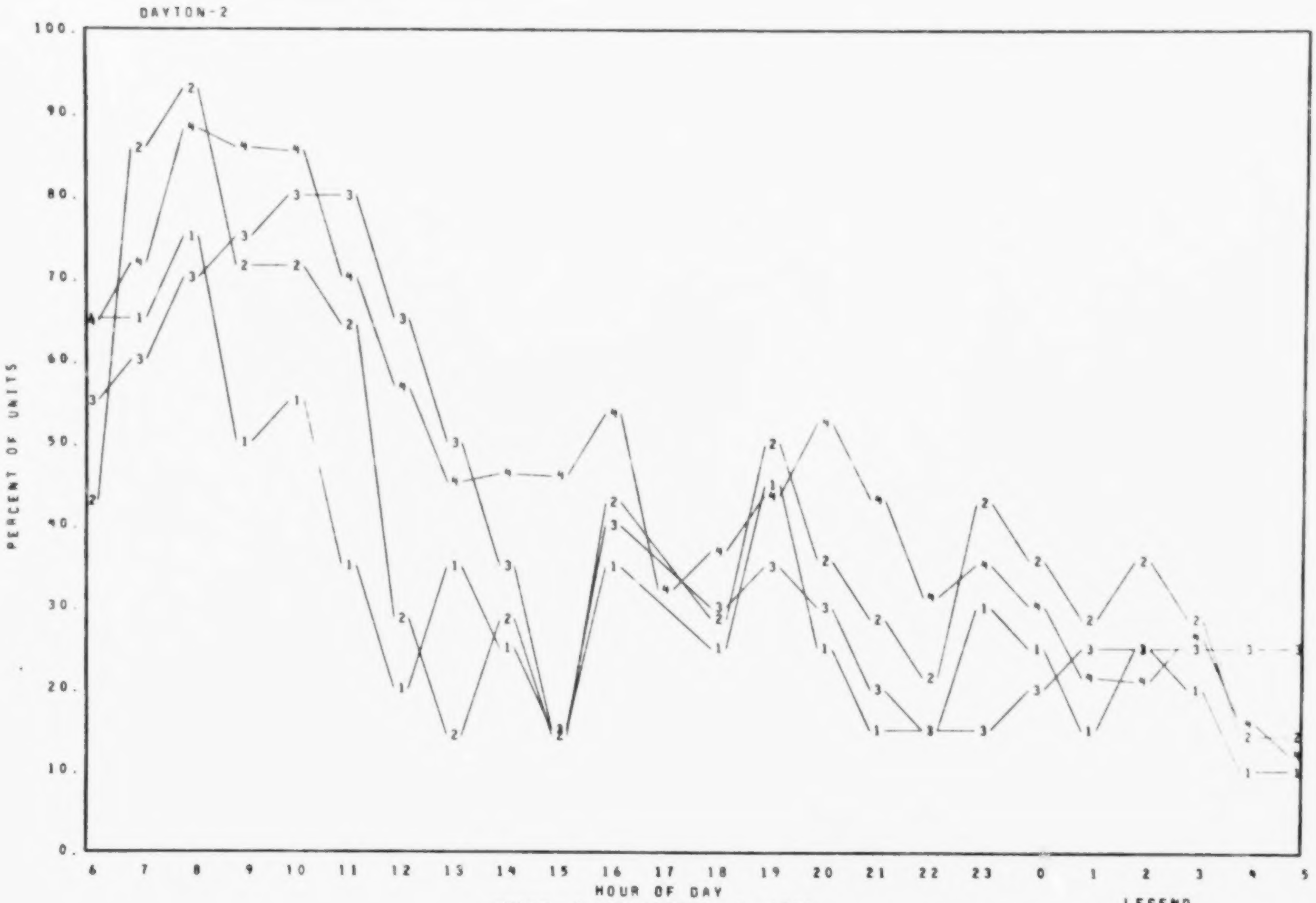


GRAPH 1 FOR AUGUST 7, 1974

LEGEND
1--PAN 0.003 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 6.000 (10..-4)/M
4--OZONE 0.080 PPM

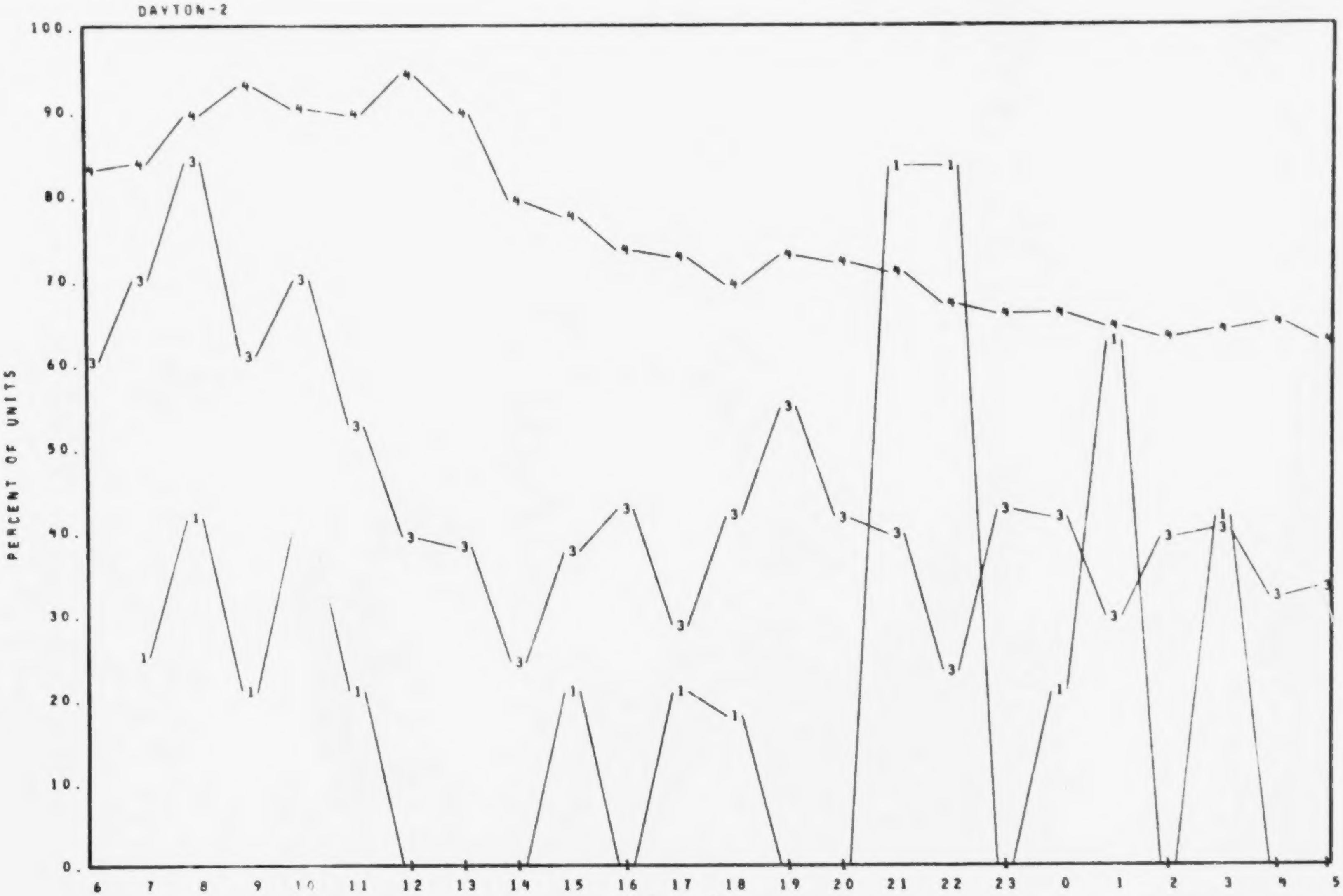


GRAPH 2 FOR AUGUST 7, 1974



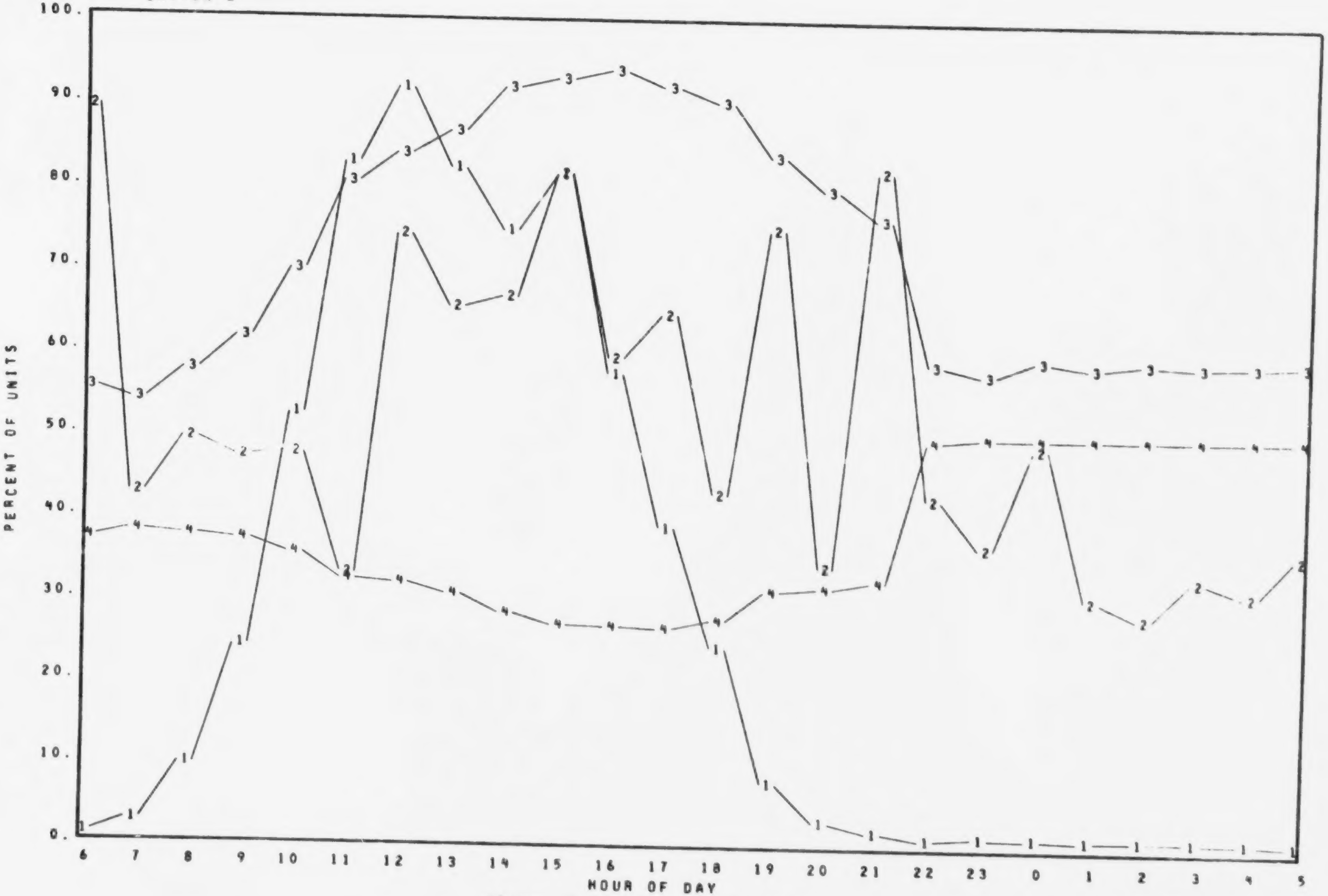
GRAPH 3 FOR AUGUST 7, 1974

LEGEND
1--ETHYLENE 0.020 PPMC
2--ACETYLENE 0.008 PPMC
3--ETHANE 0.020 PPMC
4--NON-METHANE HYDROCARBON 0.800 PPMC



GRAPH 4 FOR AUGUST 7, 1974

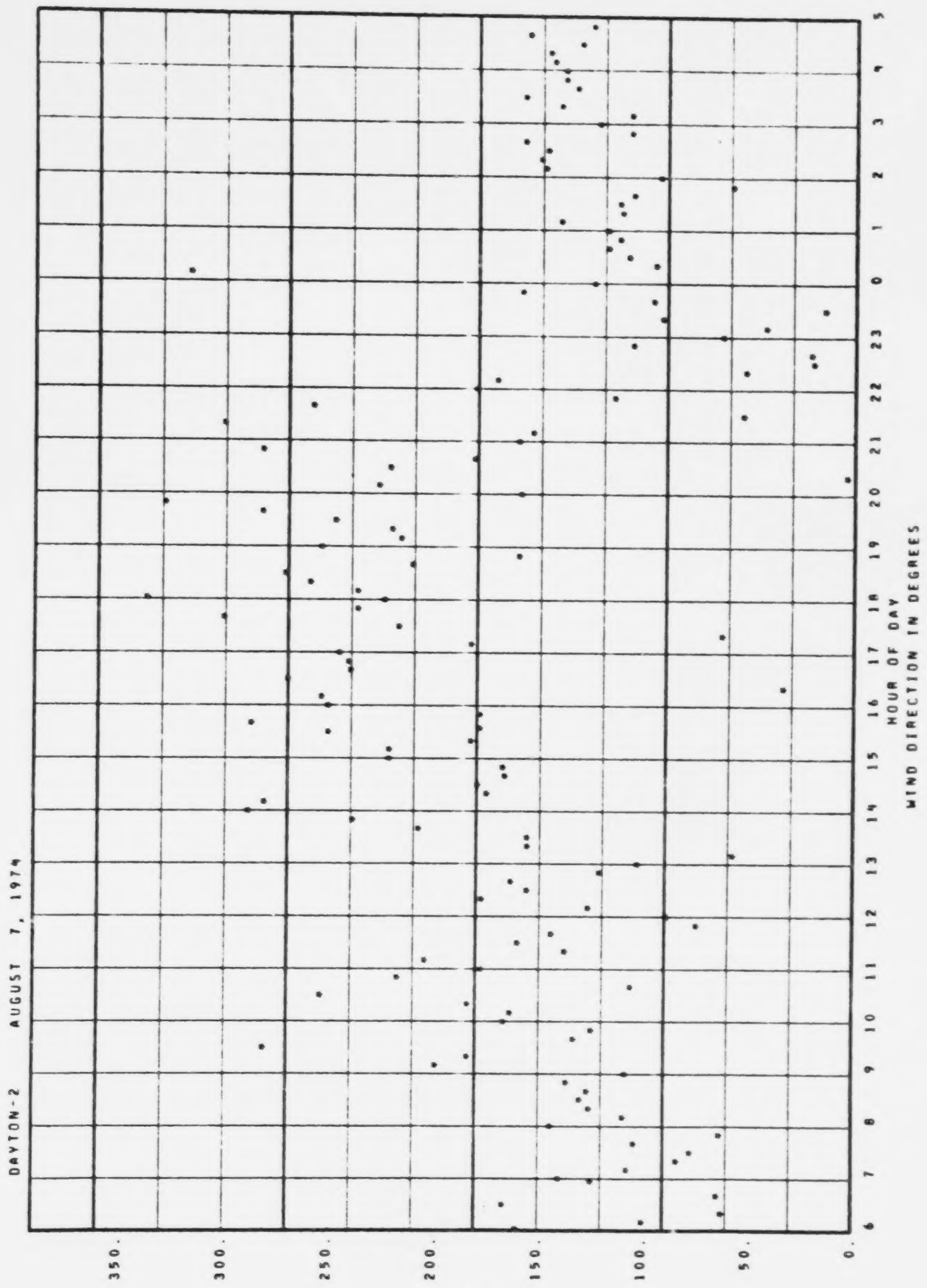
DAYTON-2

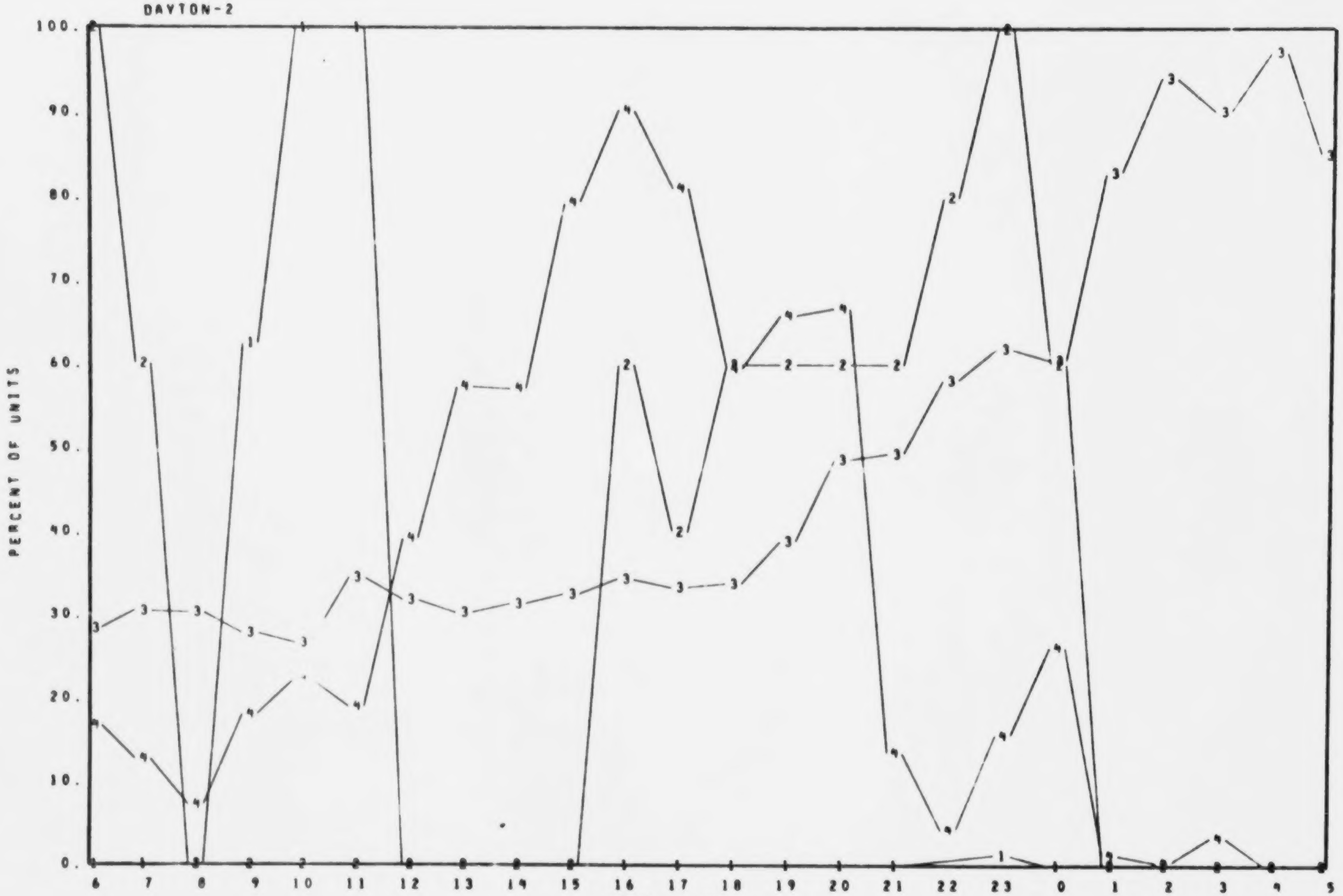


GRAPH 5 FOR AUGUST 7, 1974

LEGEND

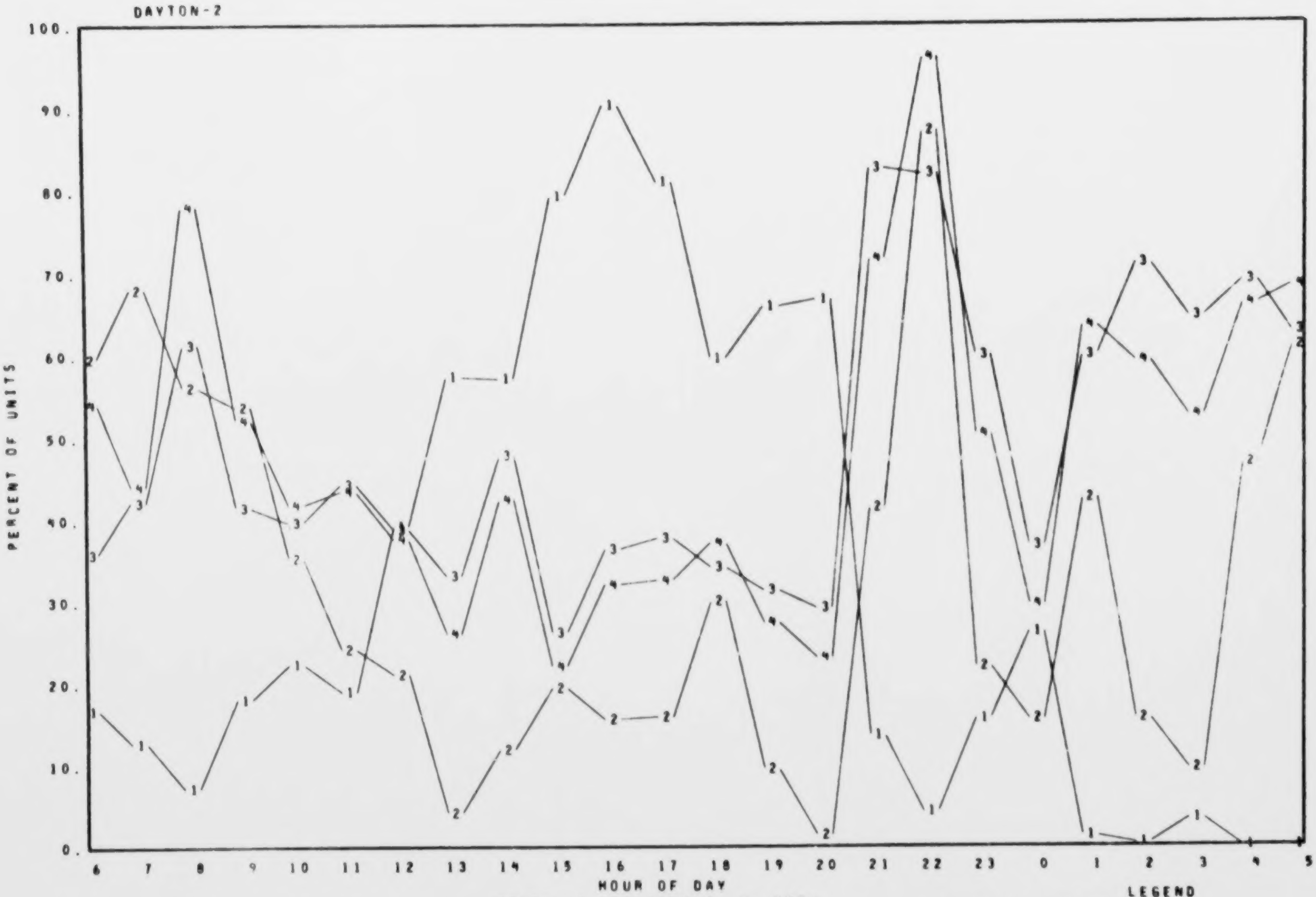
1--GLOBAL IRRADIANCE 0.900 CAL/SQ.CM/MIN
2--WIND SPEED 8.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE [illegible] PERCENT


DAYTON-2 AUGUST 7, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5



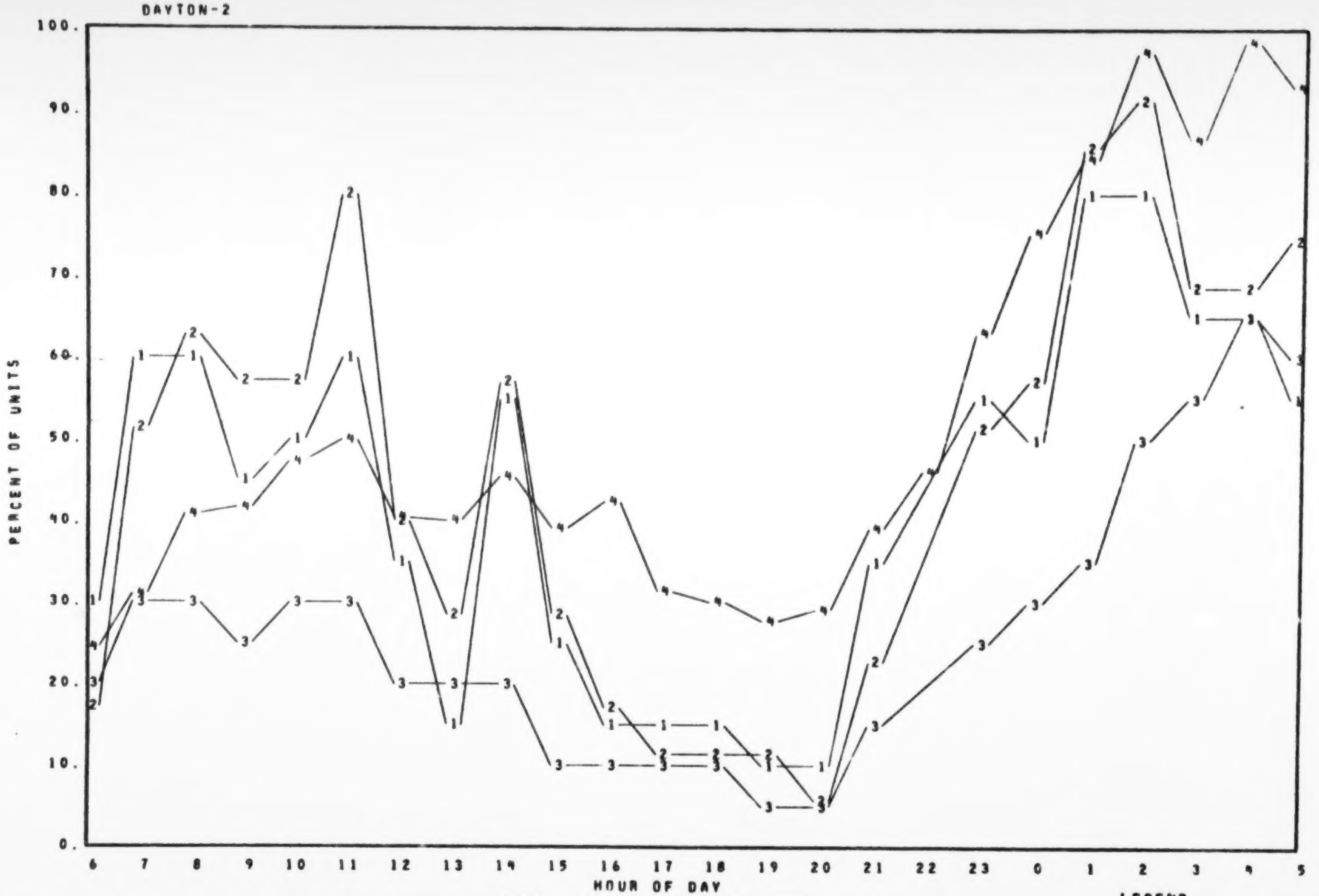
GRAPH 1 FOR AUGUST 8, 1979

LEGEND
1--PAN 0.008 PPM
2--NITRIC ACID 0.005 PPM
3--LIGHT SCATTERING 1.000 (10**-4)/M
4--OZONE 0.090 PPM



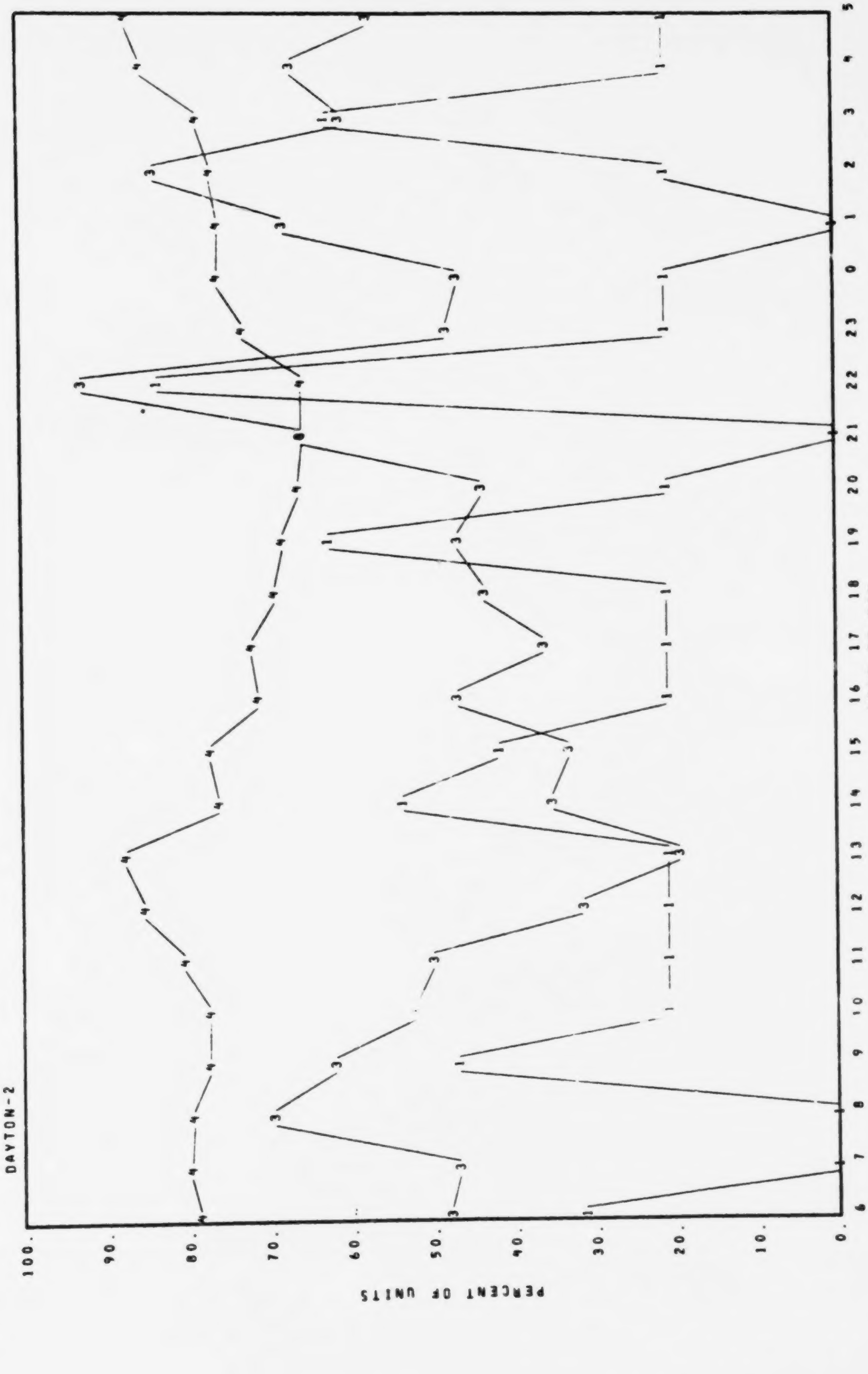
GRAPH 2 FOR AUGUST 8, 1974

LEGEND
1--OZONE 0.090 PPM
2--NITRIC OXIDE 0.030 PPM
3--NITROGEN DIOXIDE 0.050 PPM
4--NITROGEN OXIDES 0.070 PPM

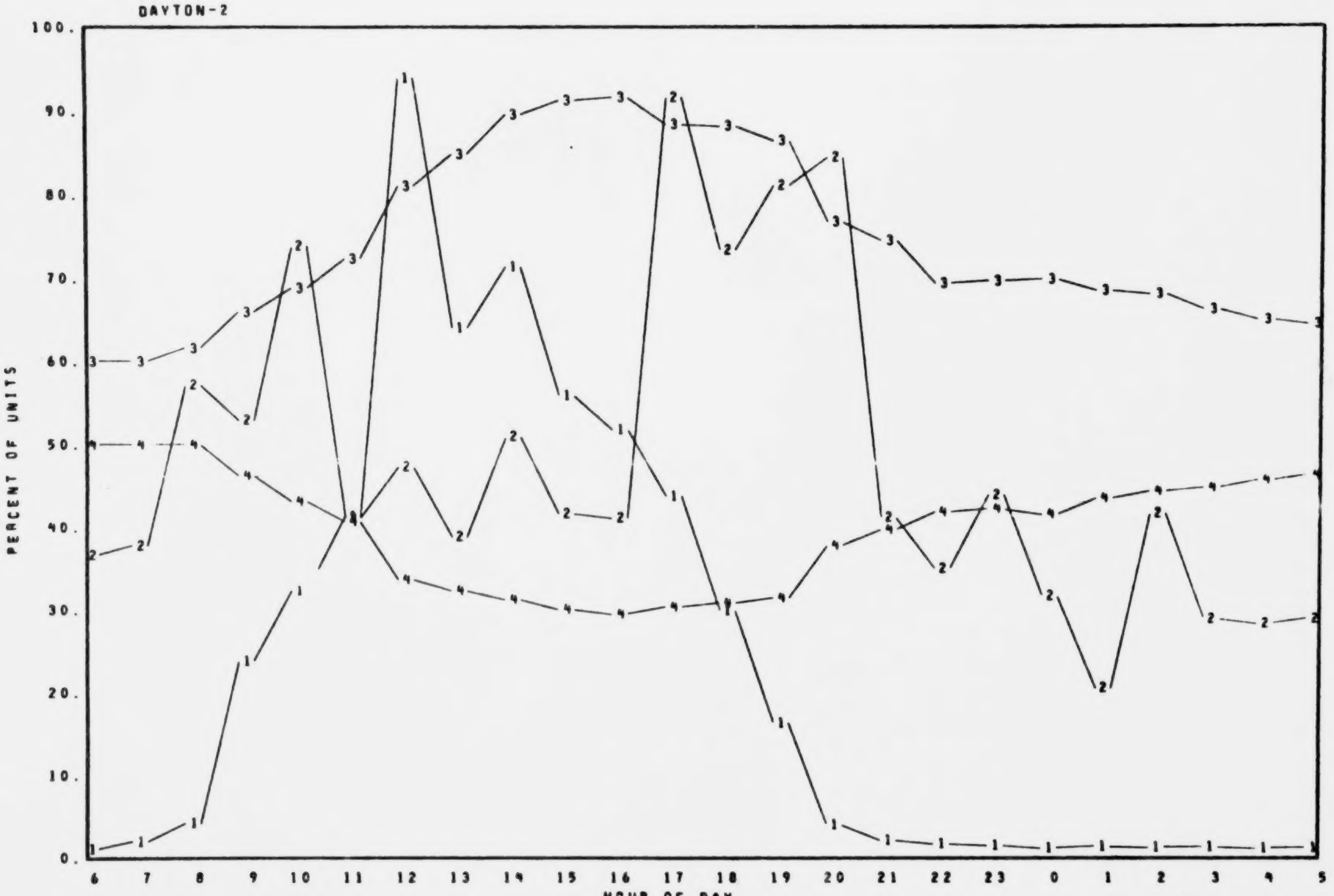


GRAPH 3 FOR AUGUST 8, 1974

LEGEND
1--ETHYLENE 0.020 PPMC
2--ACETYLENE 0.010 PPMC
3--ETHANE 0.020 PPMC
4--NON-METHANE HYDROCARBON 1.000 PPMC

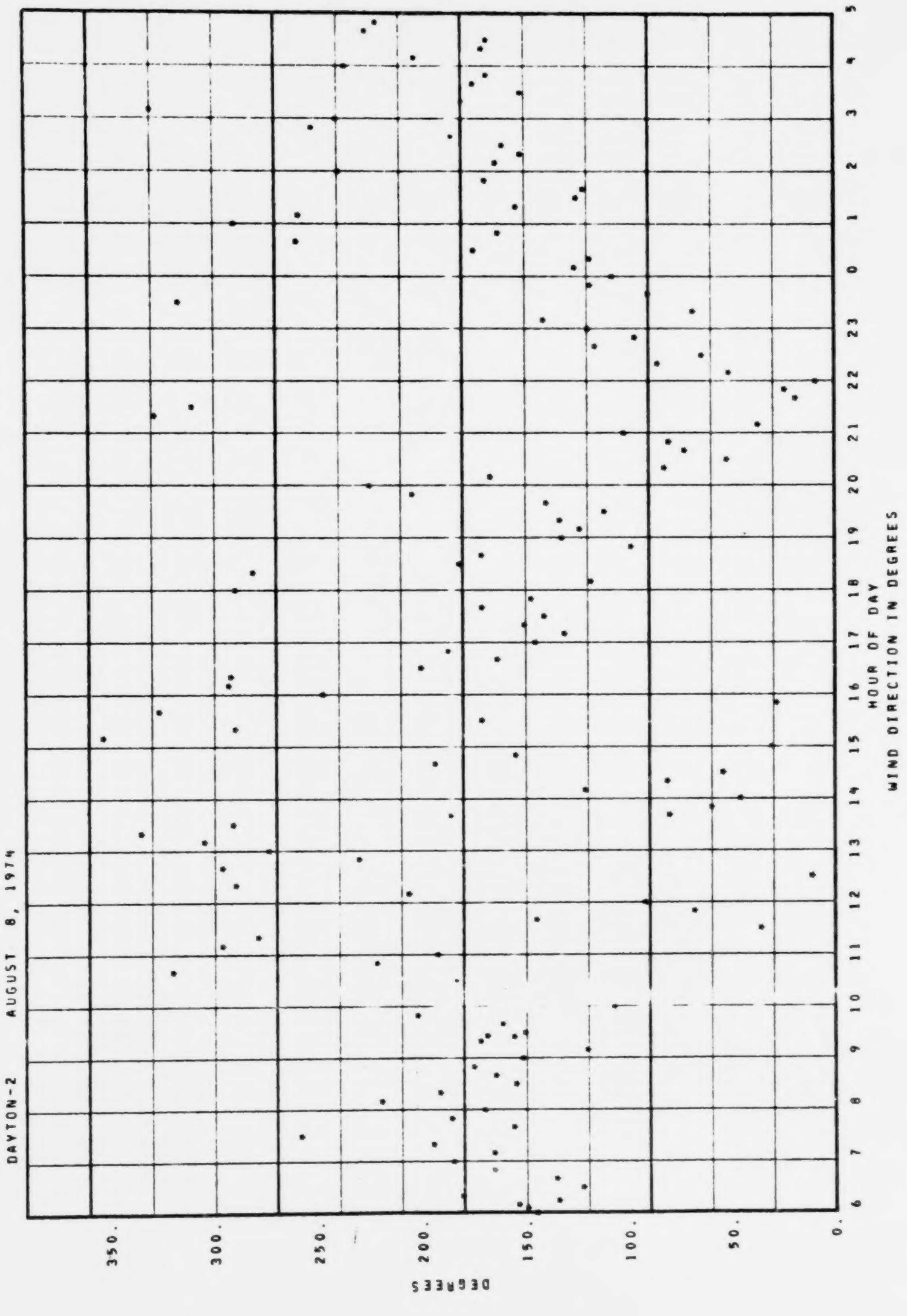


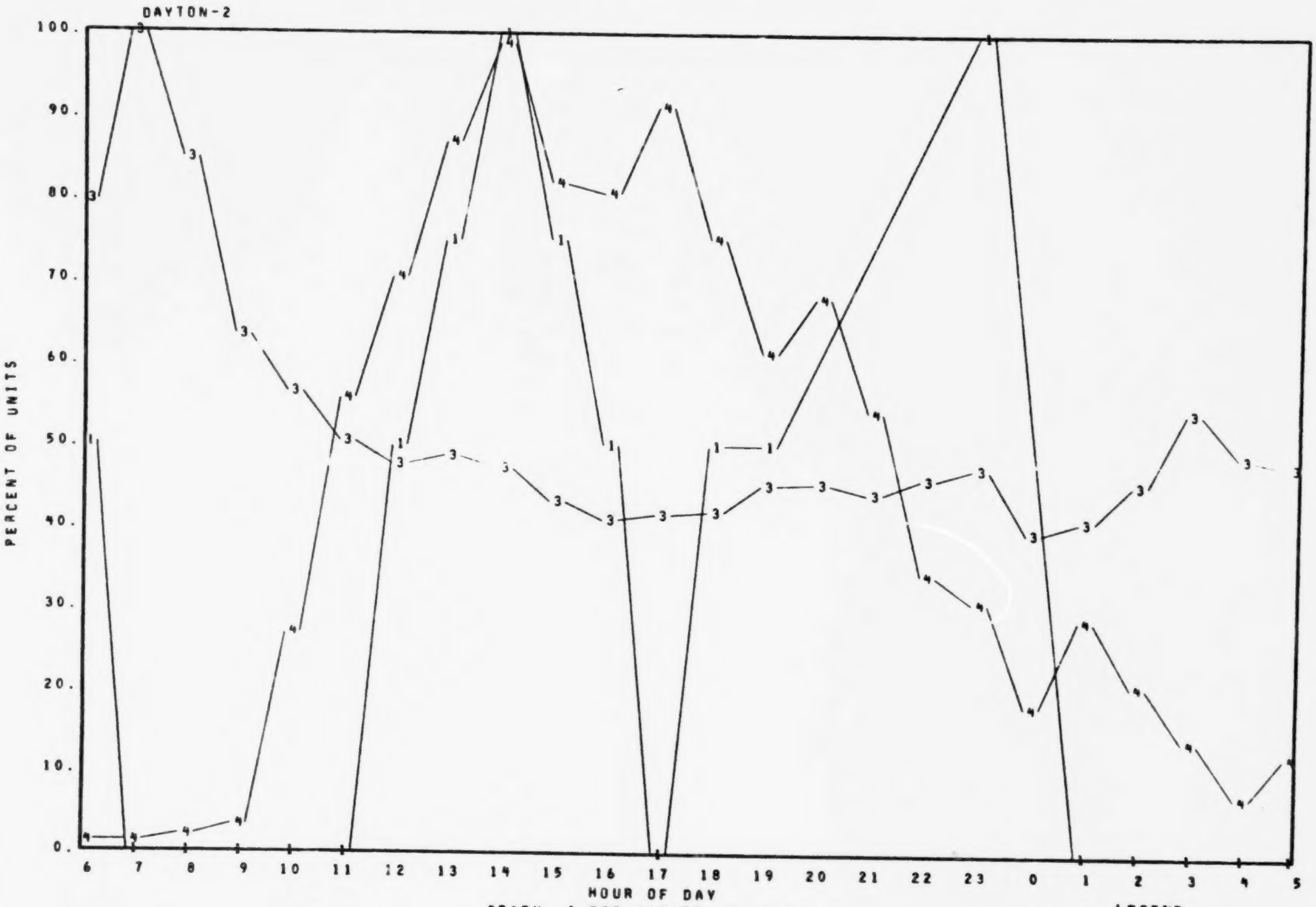
GRAPH 4 FOR AUGUST 8, 1974



GRAPH 5 FOR AUGUST 8, 1974

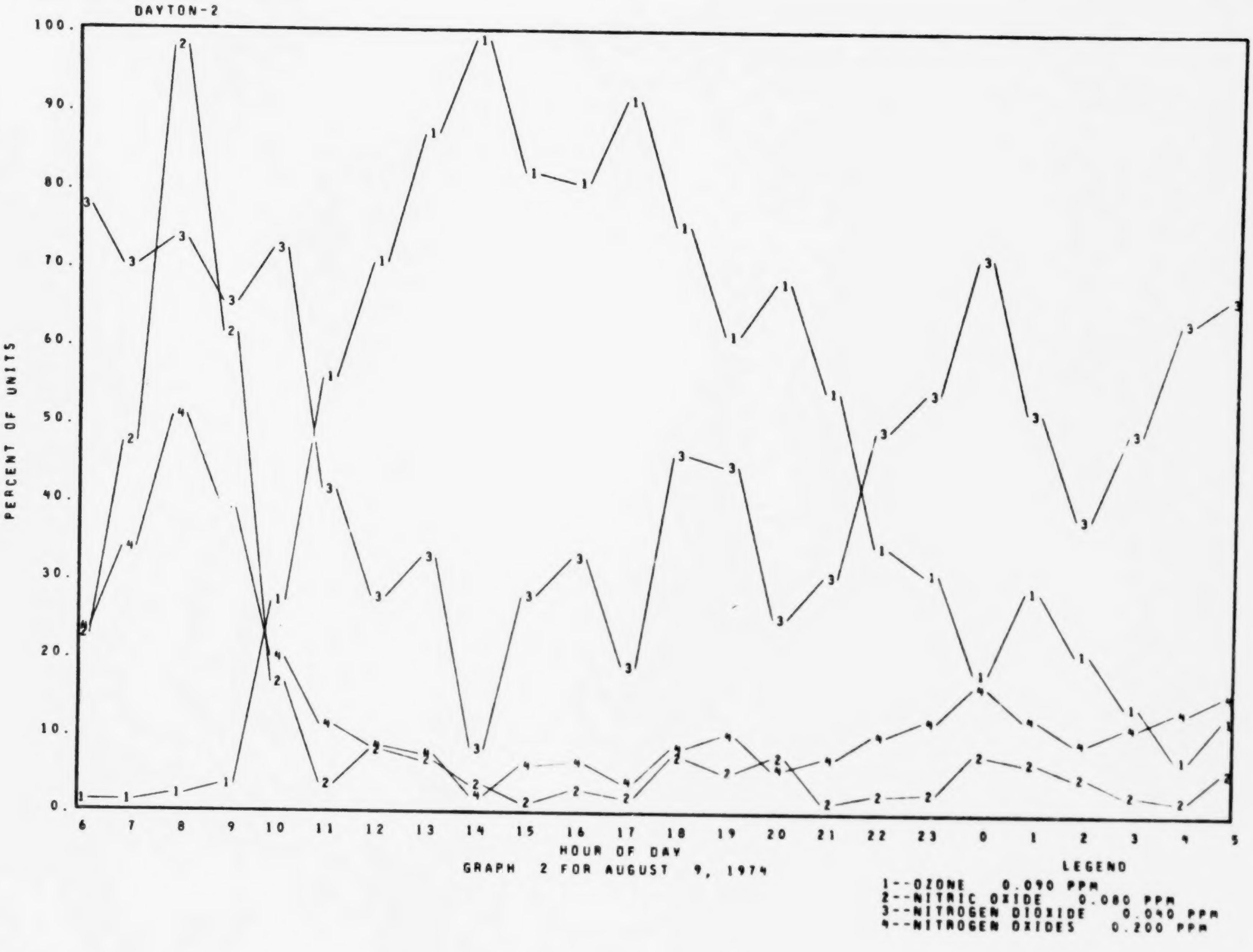
LEGEND
1--GLOBAL IRRADIANCE 0.900 CAL/SQ.CM/MIN
2--WIND SPEED 6.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE HUMIDITY 200.000 PERCENT


DAYTON-2 AUGUST 8, 1974
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
WIND DIRECTION IN DEGREES
350. 300. 250. 200. 150. 100. 50. 0.
DEGREES

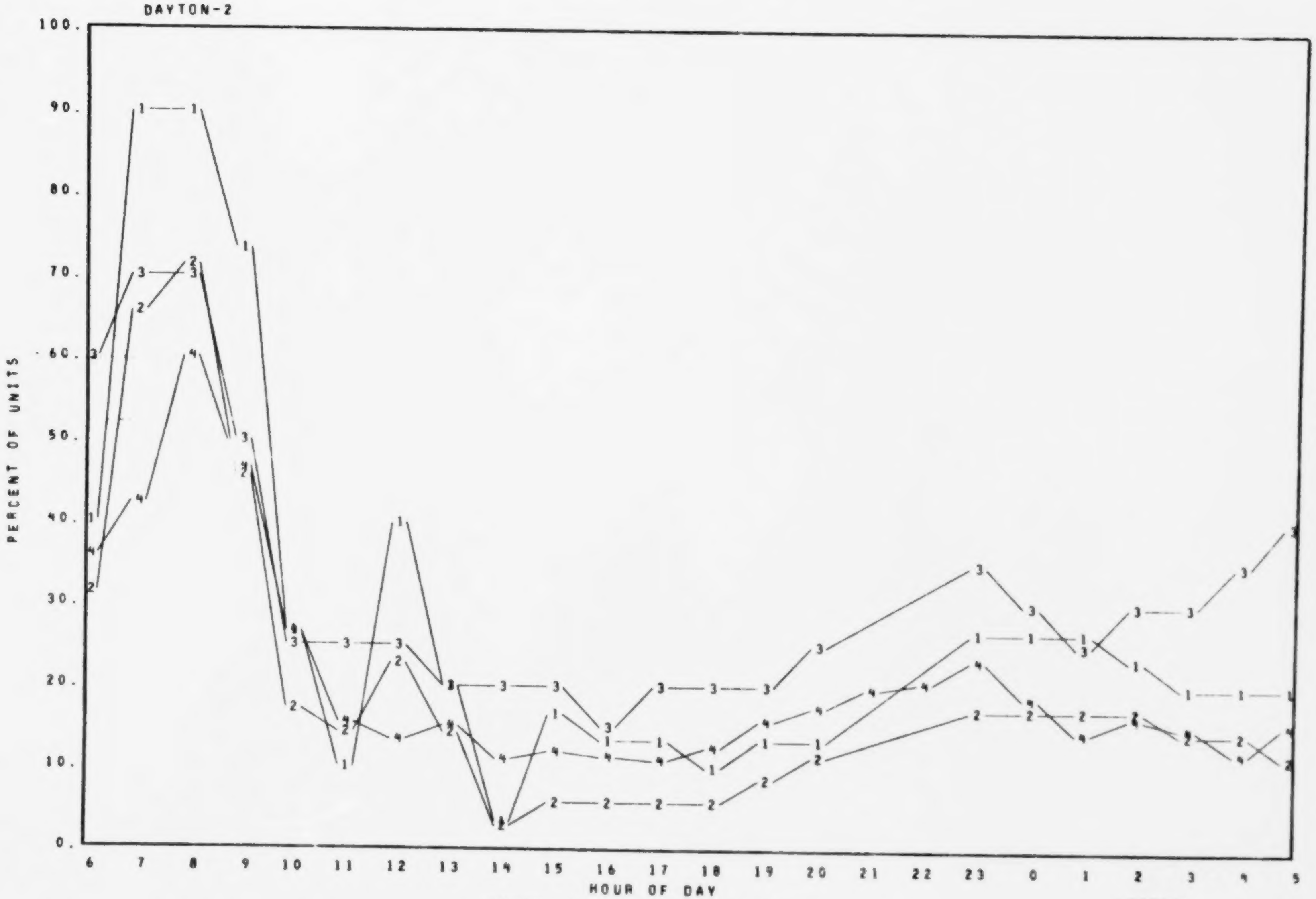


GRAPH 1 FOR AUGUST 9, 1974

LEGEND
1--PAN 0.004 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 8.000 (10**-4)/M
4--OZONE 0.090 PPM

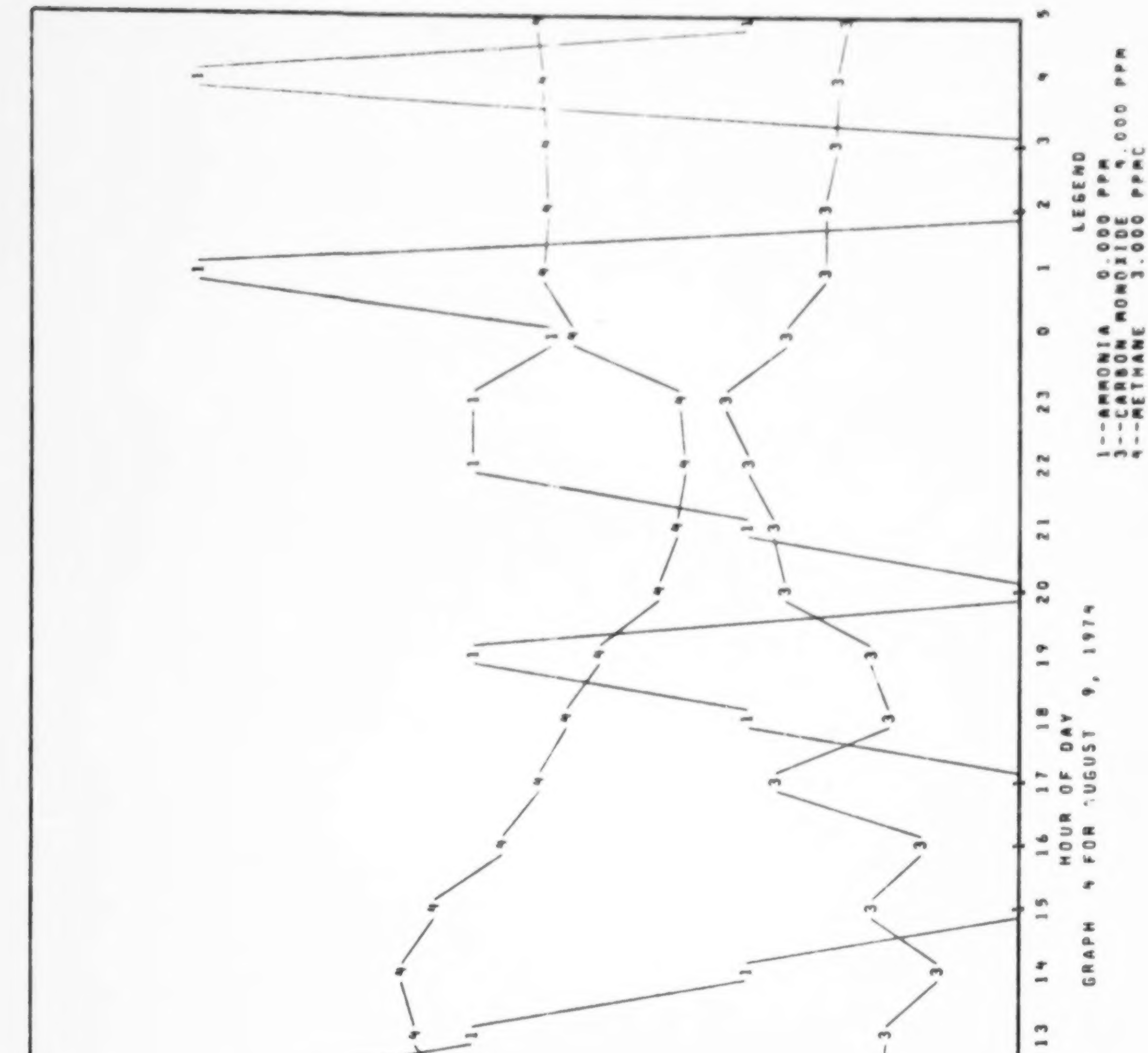


GRAPH 2 FOR AUGUST 9, 1974

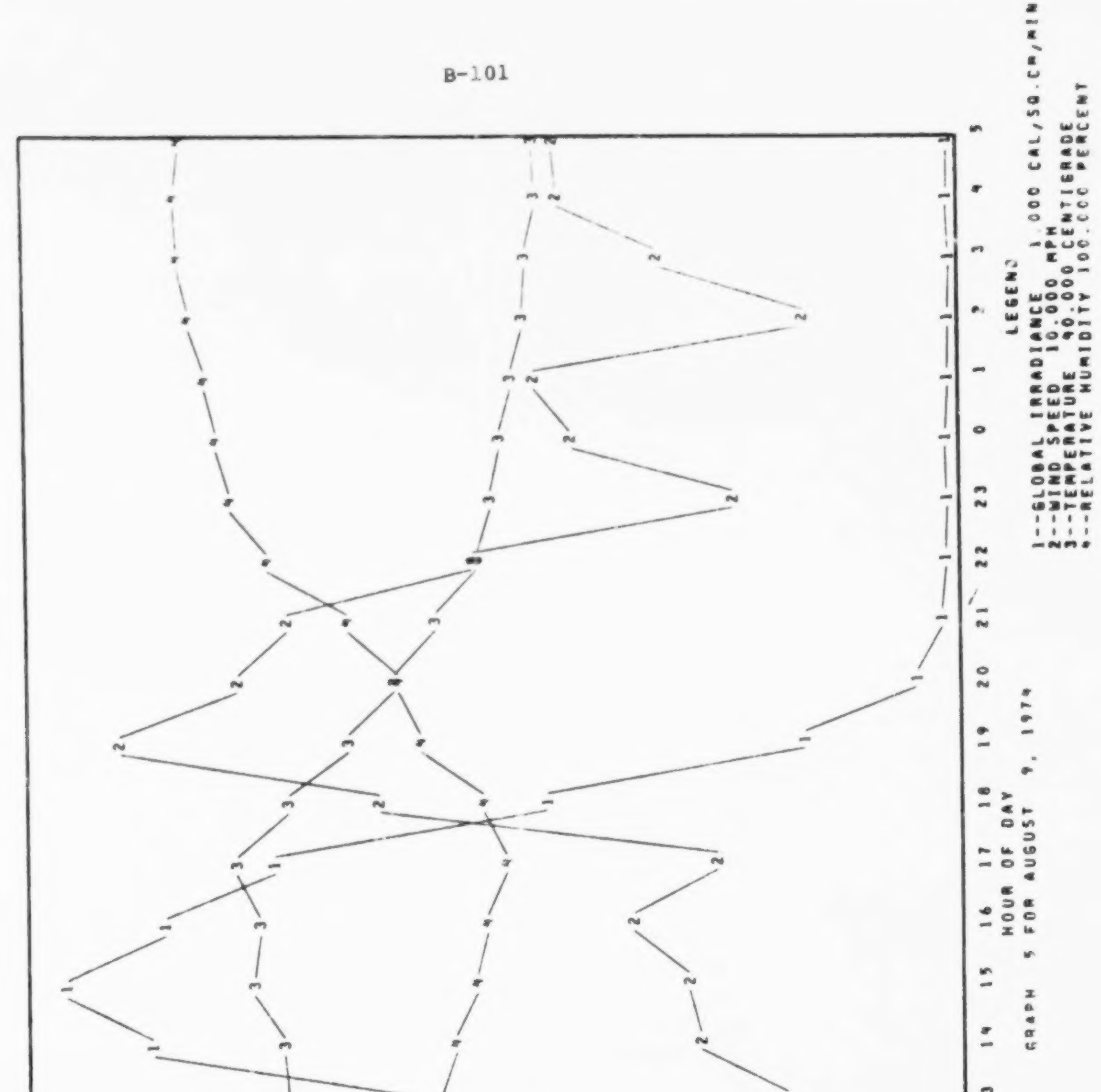


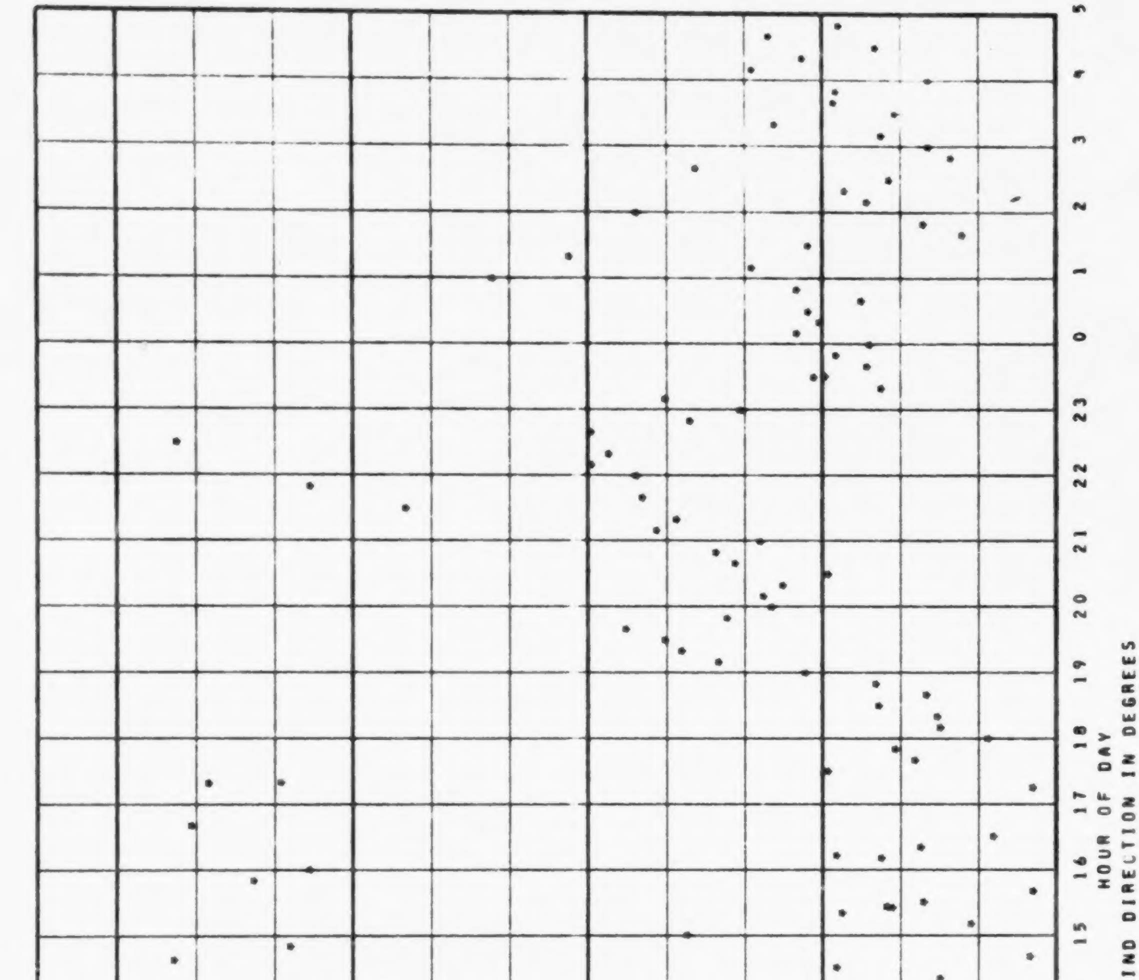
GRAPH 3 FOR AUGUST 9, 1974

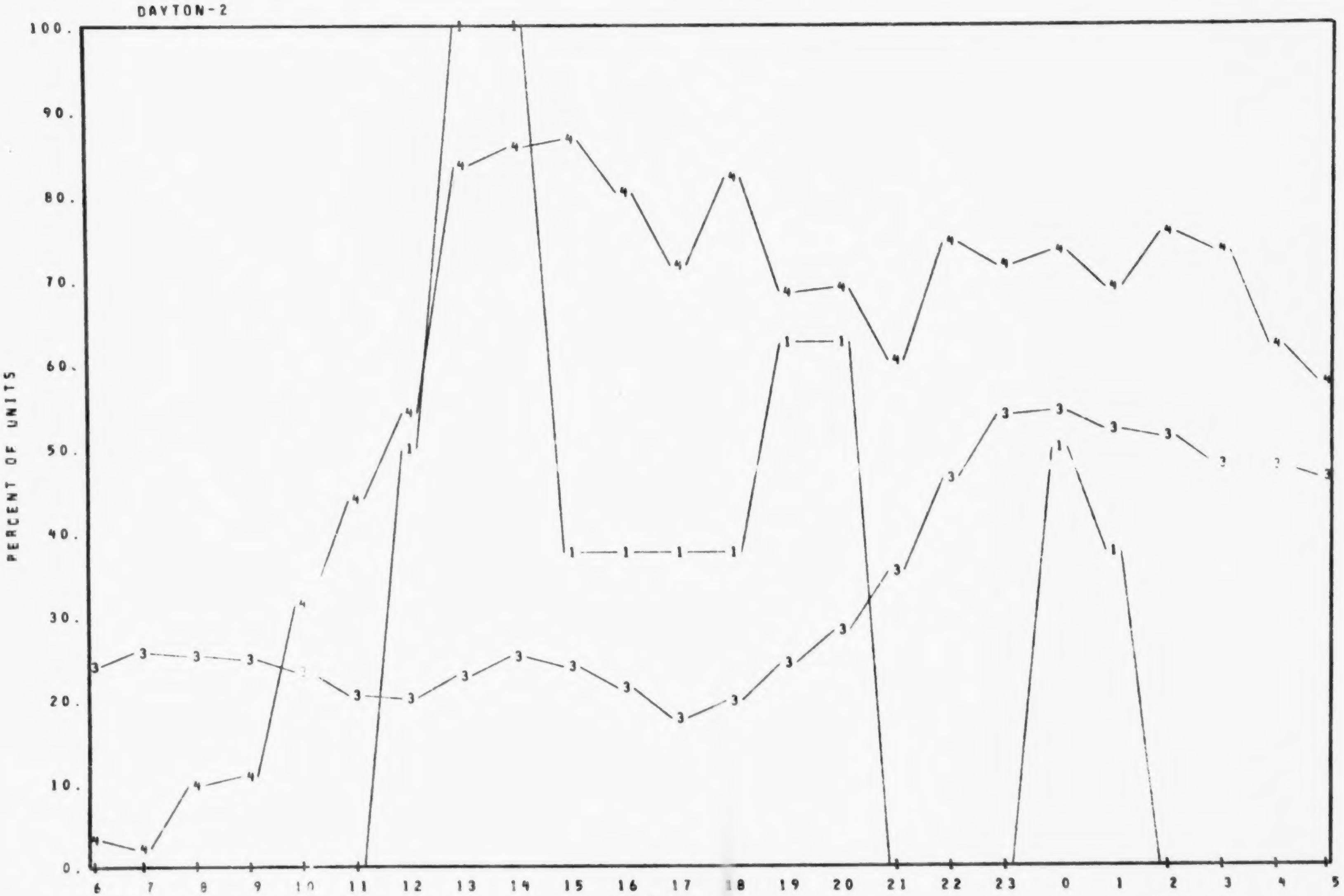
LEGEND
1--ETHYLENE 0.030 PPMC
2--ACETYLENE 0.020 PPMC
3--ETHANE 0.020 PPMC
4--NON-METHANE HYDROCARBON 2.000 PPMC



GRAPH 4 FOR AUGUST 9, 1974


DAYTON-2
PERCENT OF UNITS
0.
10.
20.
30.
40.
50.
60.
70.
80.
90.
100.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 5 FOR AUGUST 9, 1974
LEGEND
1--GLOBAL IRRADIANCE 1.000 CAL/SQ.CM/MIN
2--WIND SPEED 10.000 MPH
3--TEMPERATURE 40.000 CENTIGRADE
4--RELATIVE HUMIDITY 100.000 PERCENT


DAYTON-2 AUGUST 9, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350. 300. 250. 200. 150. 100. 50. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

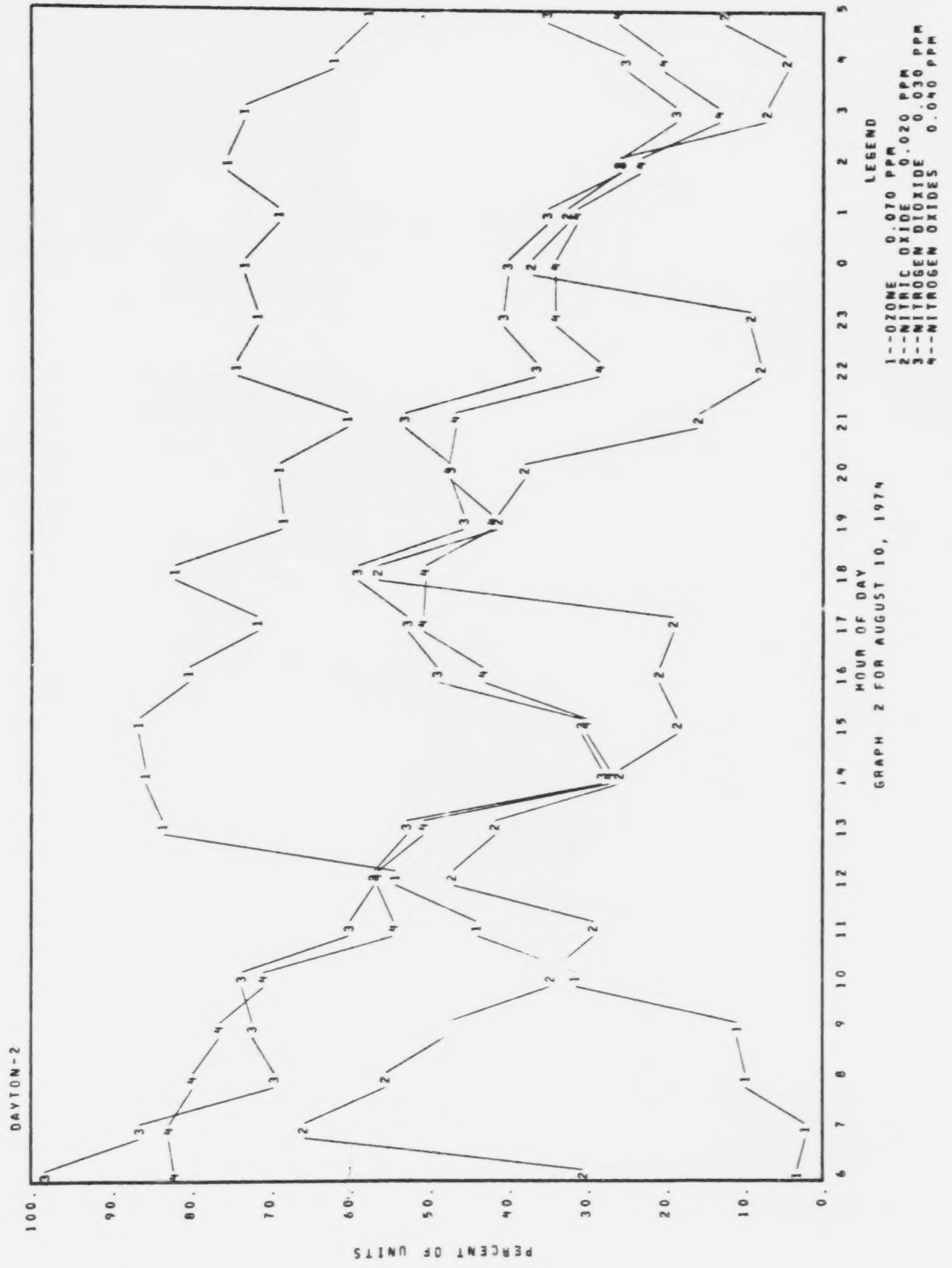


HOUR OF DAY

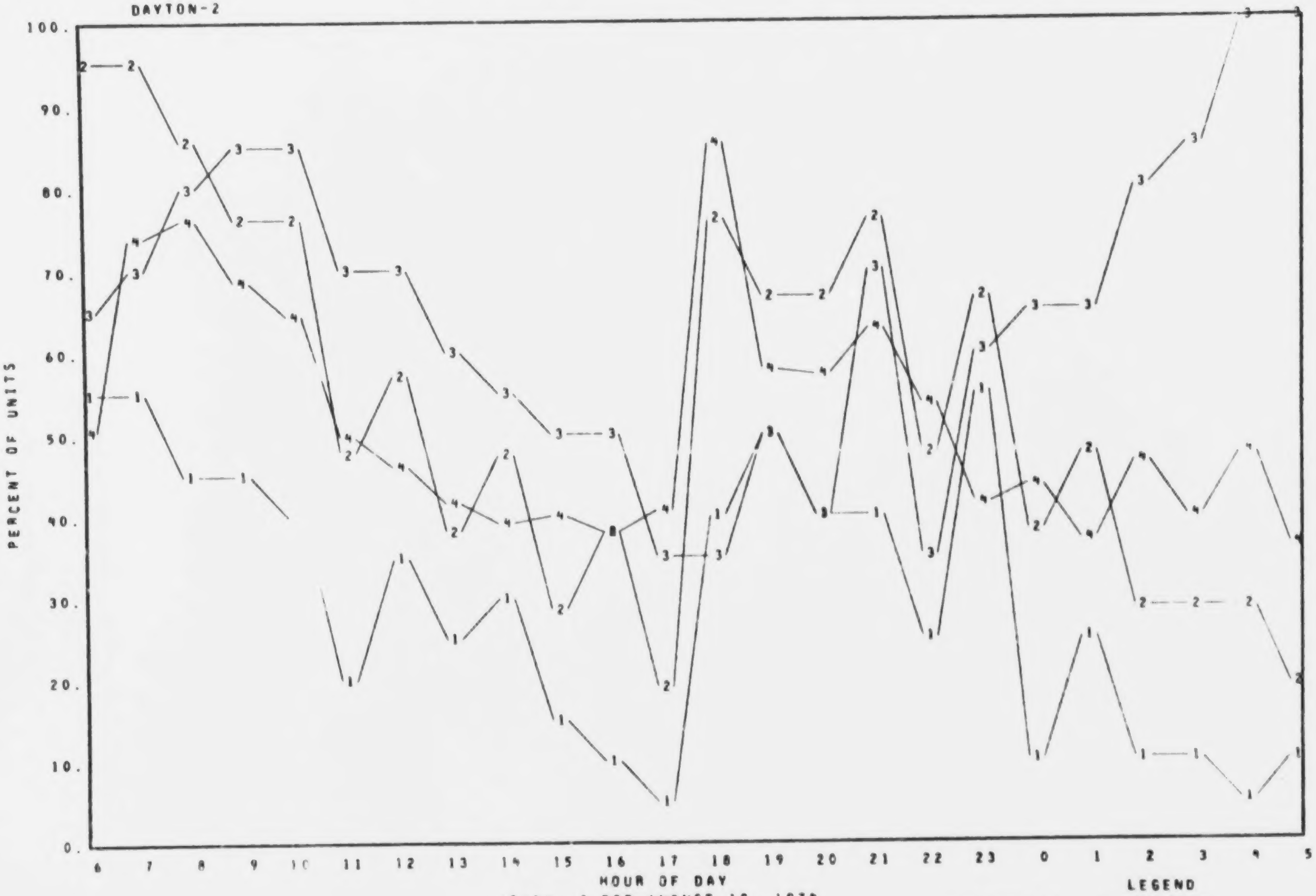
GRAPH 1 FOR AUGUST 10, 1974

LEGEND

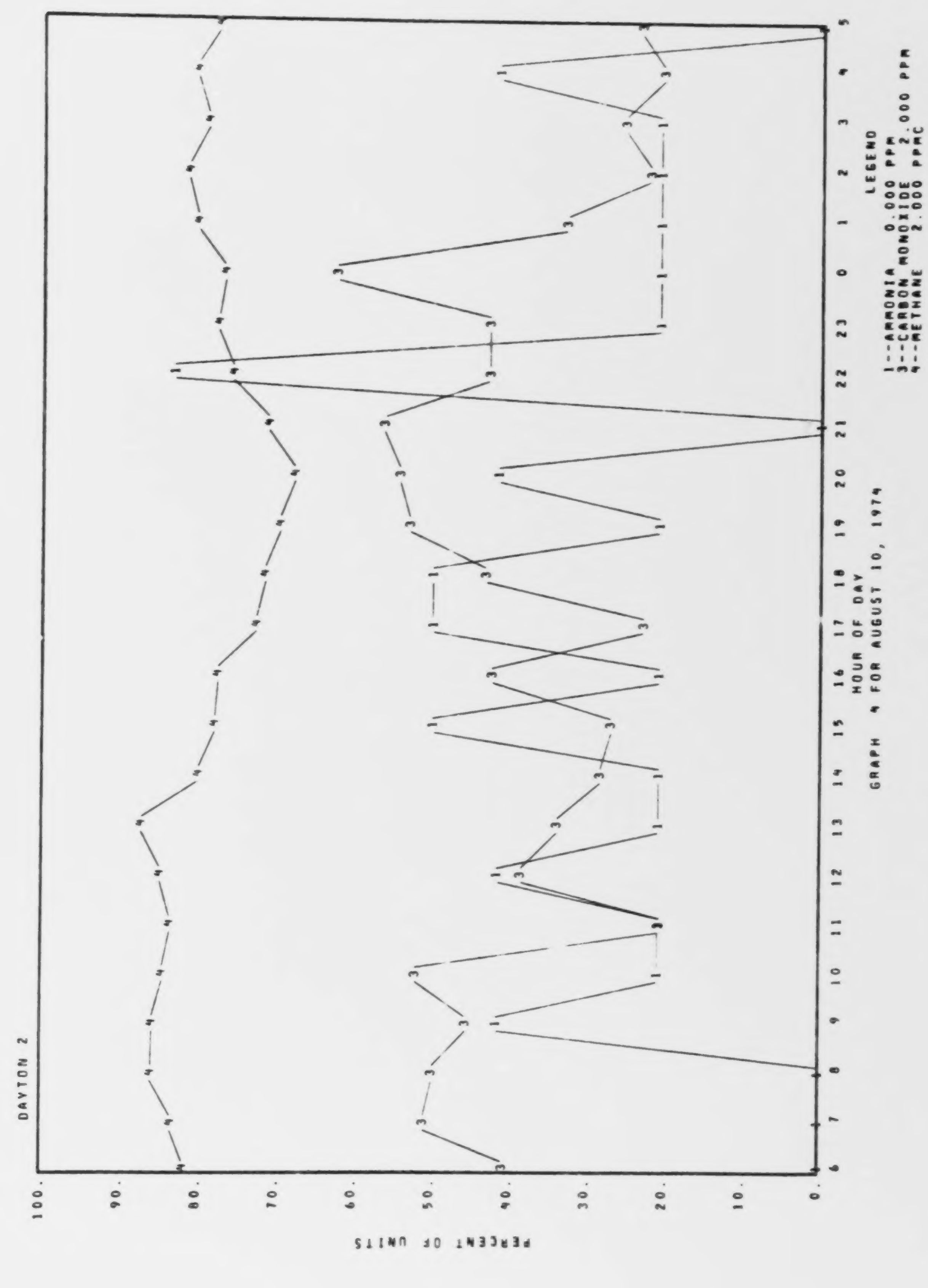
1--PAN 0.008 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 20.000 (10.,-4)/M
4--OZONE 0.070 PPM



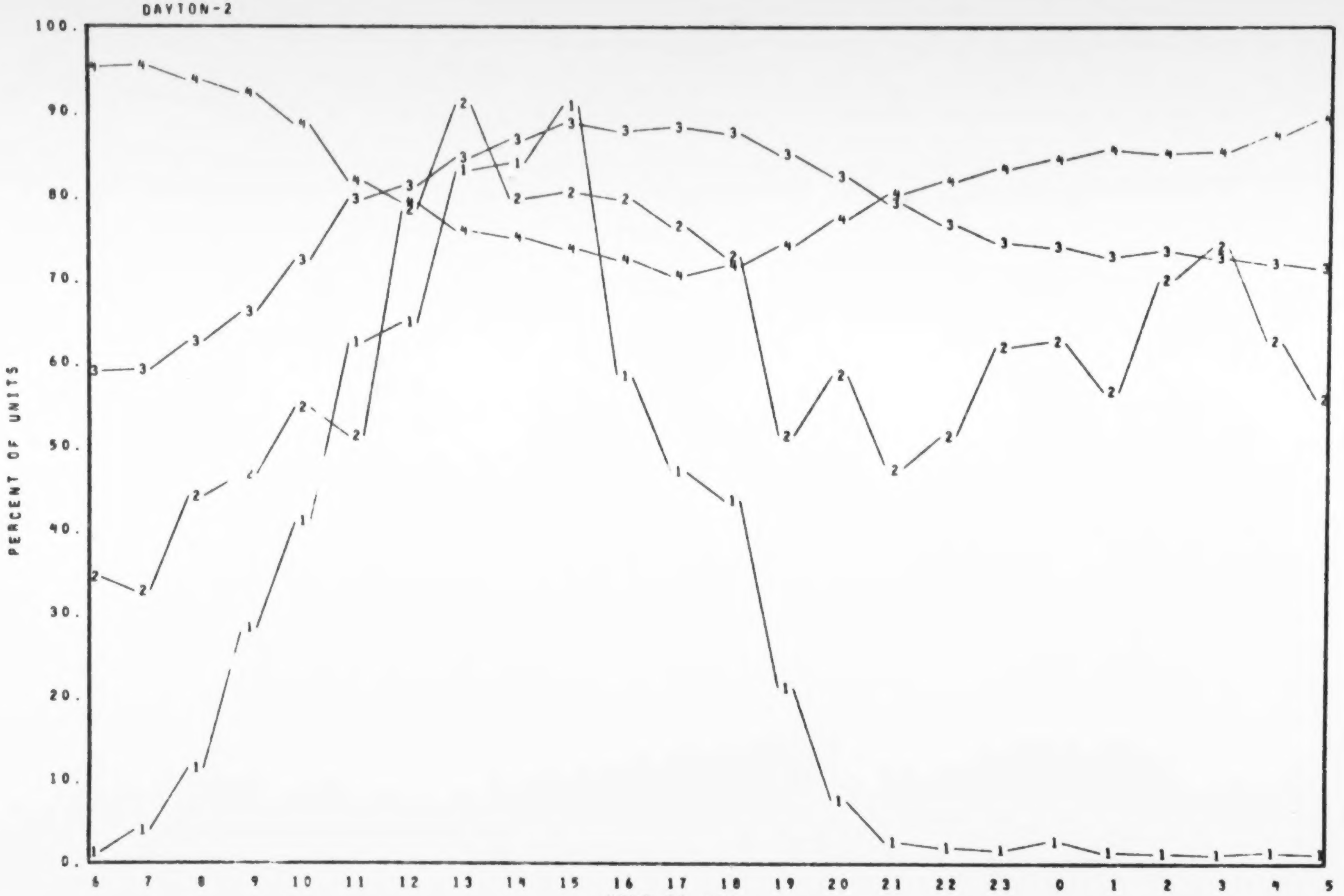
GRAPH 2 FOR AUGUST 10, 1974



[illegible] FOR AUGUST 10, 1974

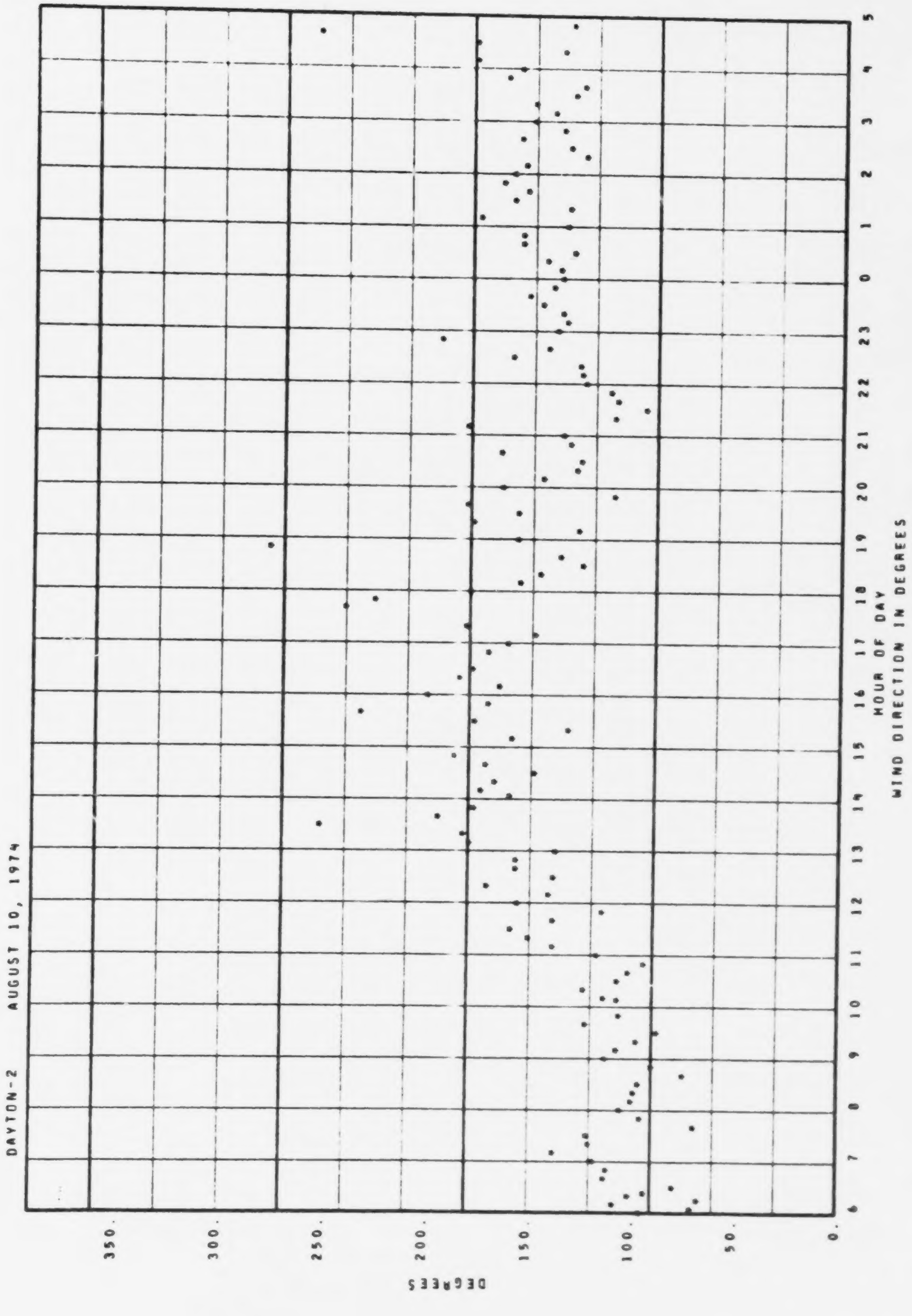


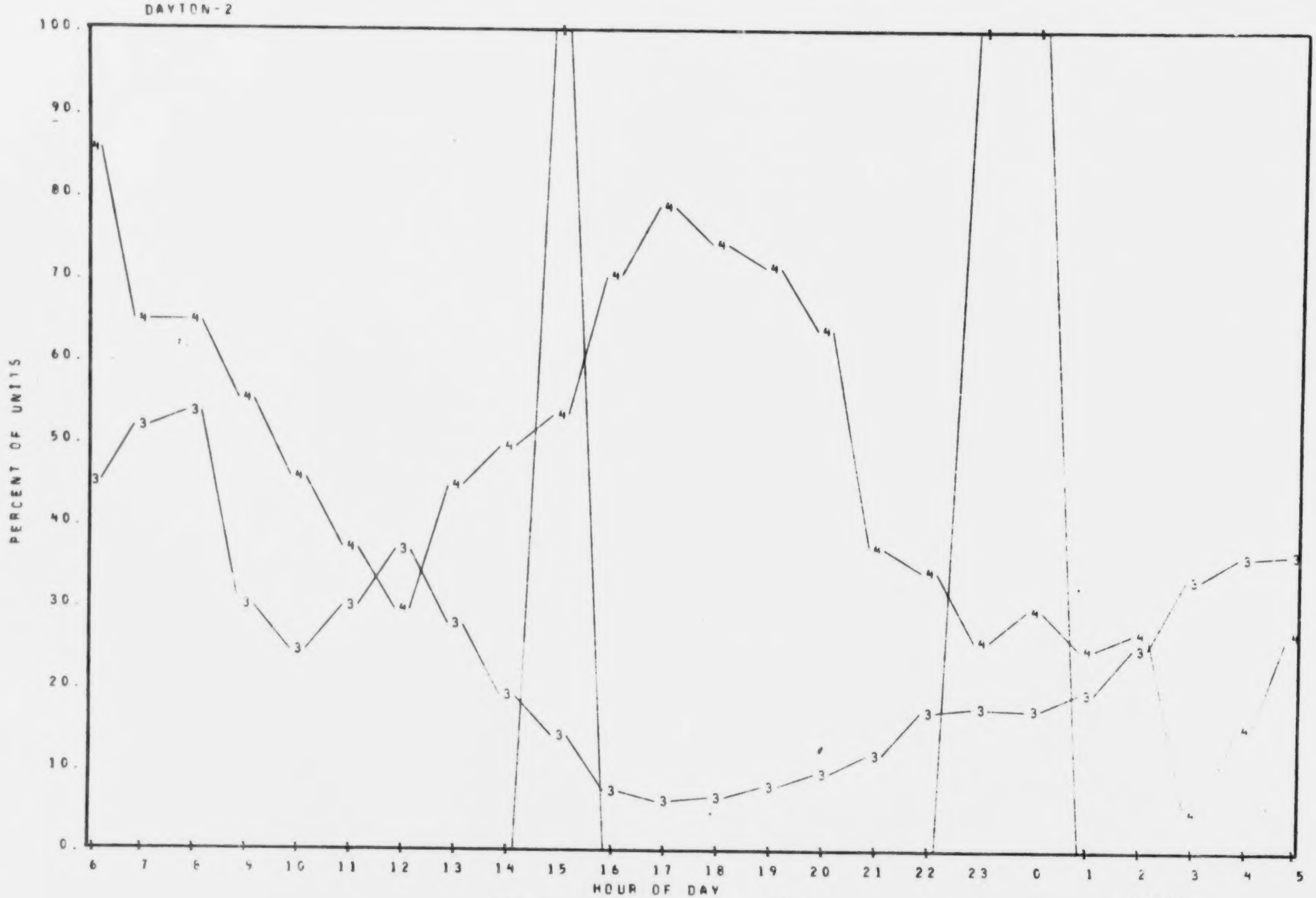
GRAPH 4 FOR AUGUST 10, 1974



GRAPH 5 FOR AUGUST 10, 1974

LEGEND
1--GLOBAL IRRADIANCE 0.800 CAL/SQ.CM/MIN
2--WIND SPEED 10.000 MPH
3--TEMPERATURE 30.000 CENTIGRADE
4--RELATIVE HUMIDITY 90.000 PERCENT

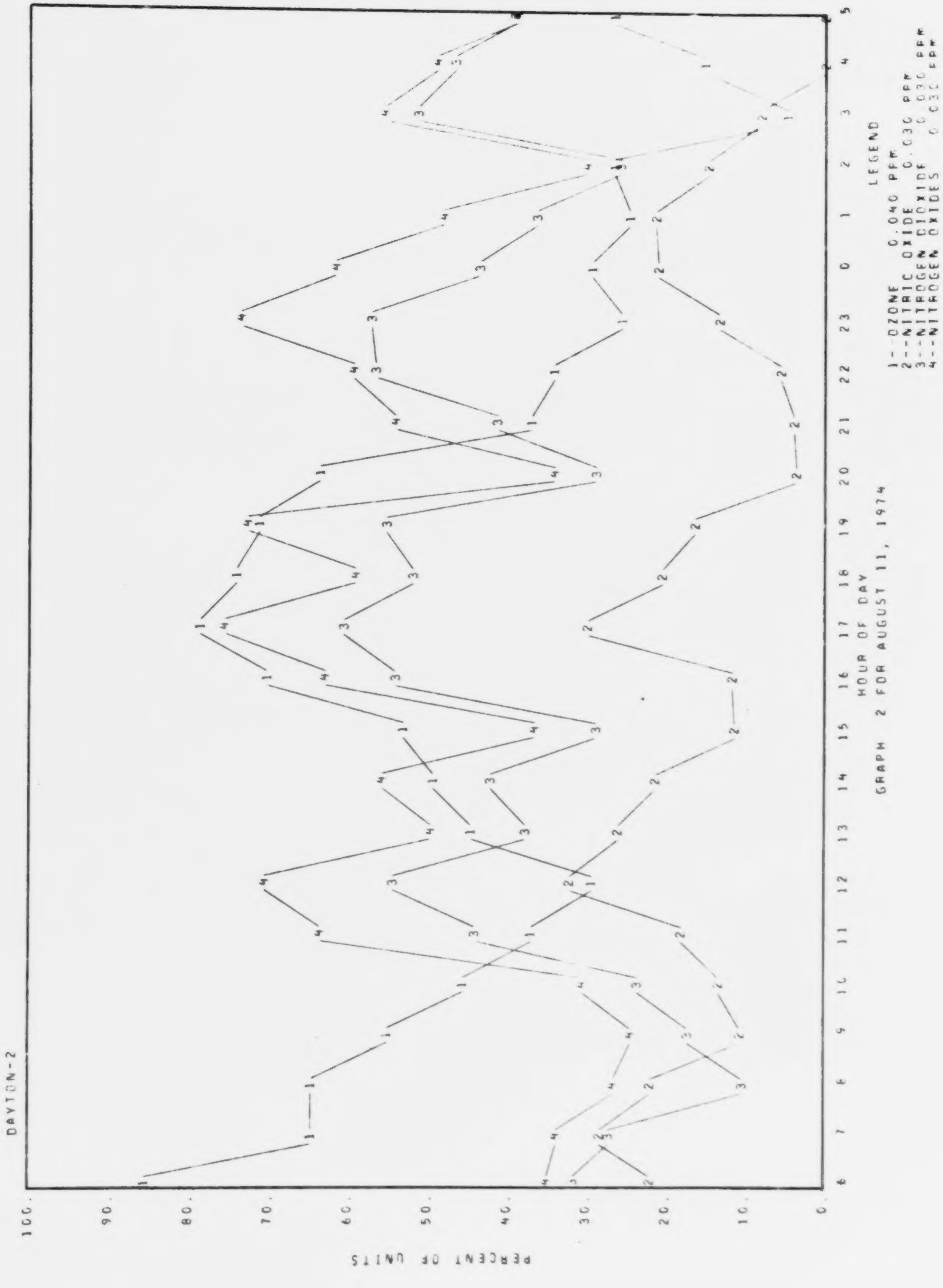

DAYTON-2
AUGUST 10, 1974
350.
300.
250.
200.
150.
100.
50.
0.
DEGREES
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
WIND DIRECTION IN DEGREES



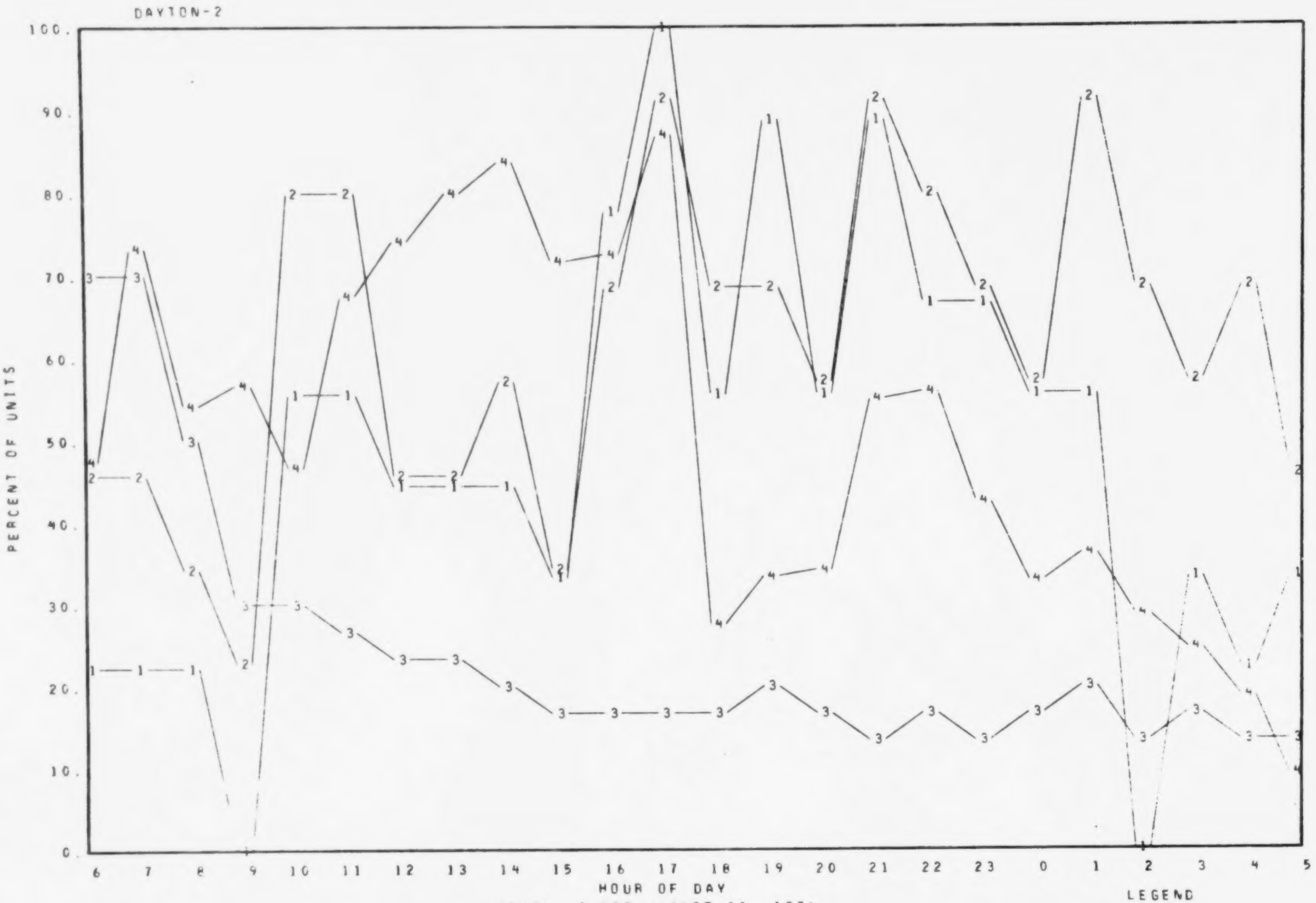
GRAPH 1 FOR AUGUST 11, 1974

LEGEND

1--PAN 0.002 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 20.000 (10.-4),M
4--OZONE 0.040 PPM

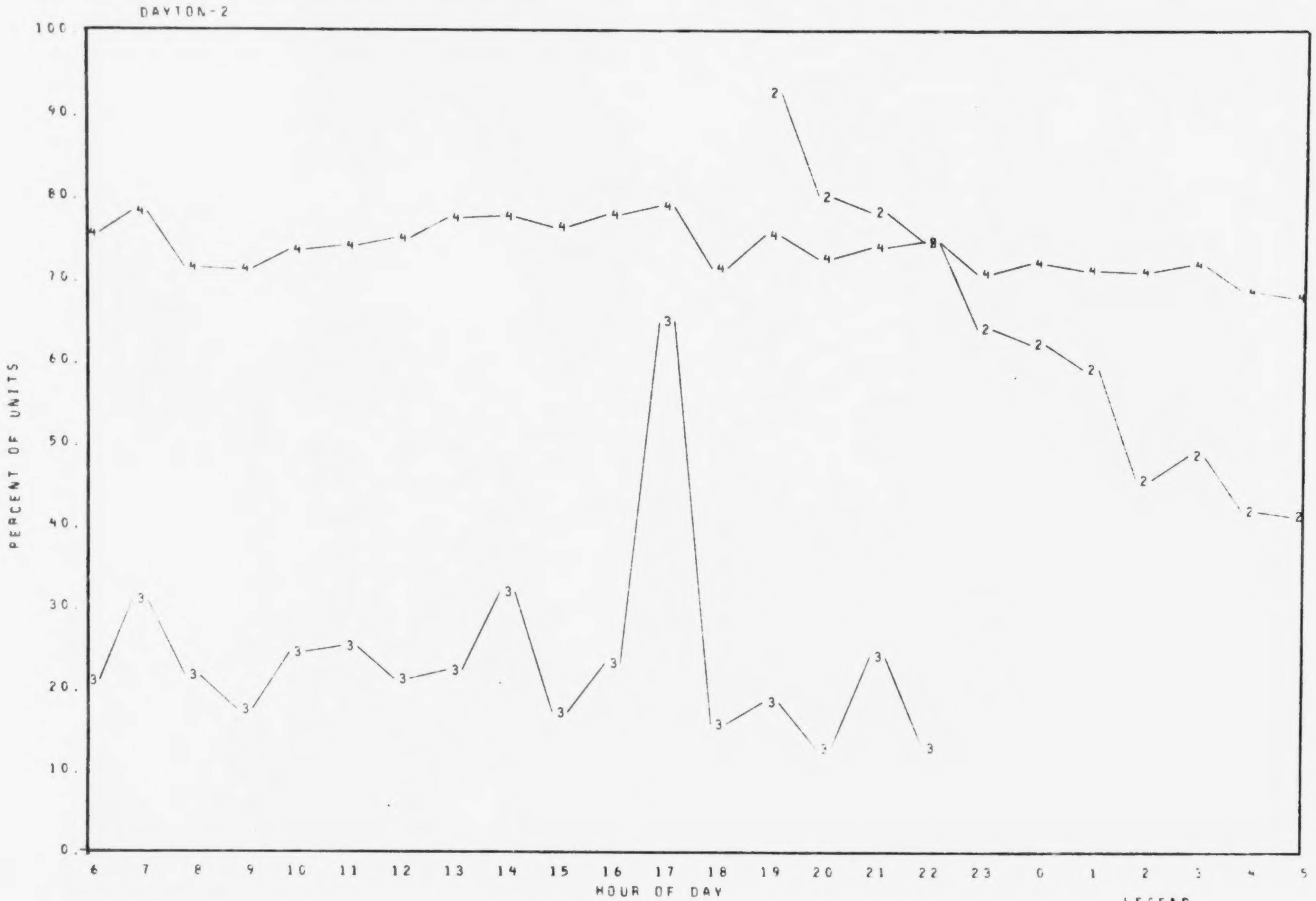


GRAPH 2 FOR AUGUST 11, 1974



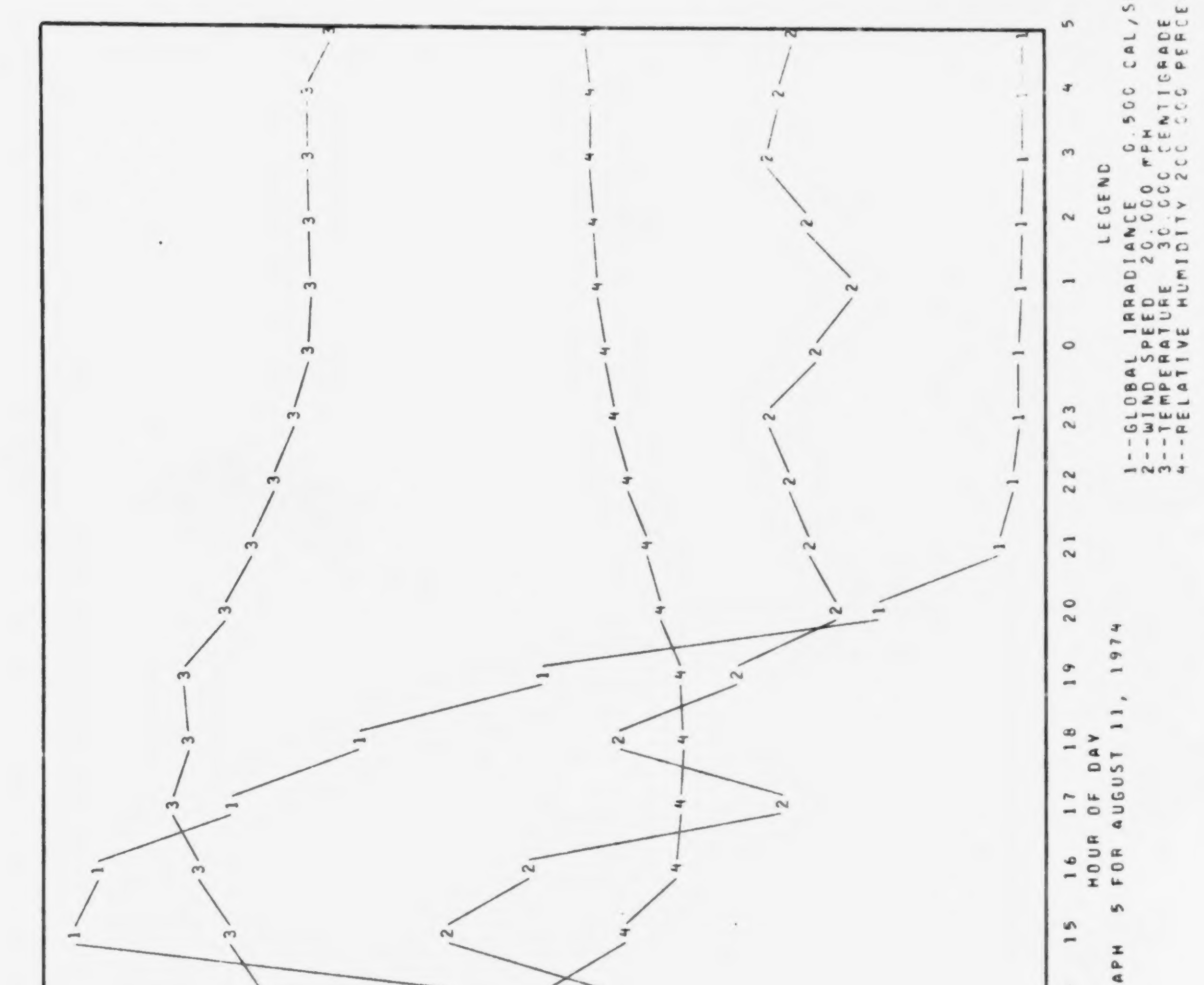
GRAPH 3 FOR AUGUST 11, 1974

LEGEND
1--ETHYLENE 0.009 PPMC
2--ACETYLENE 0.005 PPMC
3--ETHANE 0.030 PPMC
4--NON-METHANE HYDROCARBON 0.400 PPMC

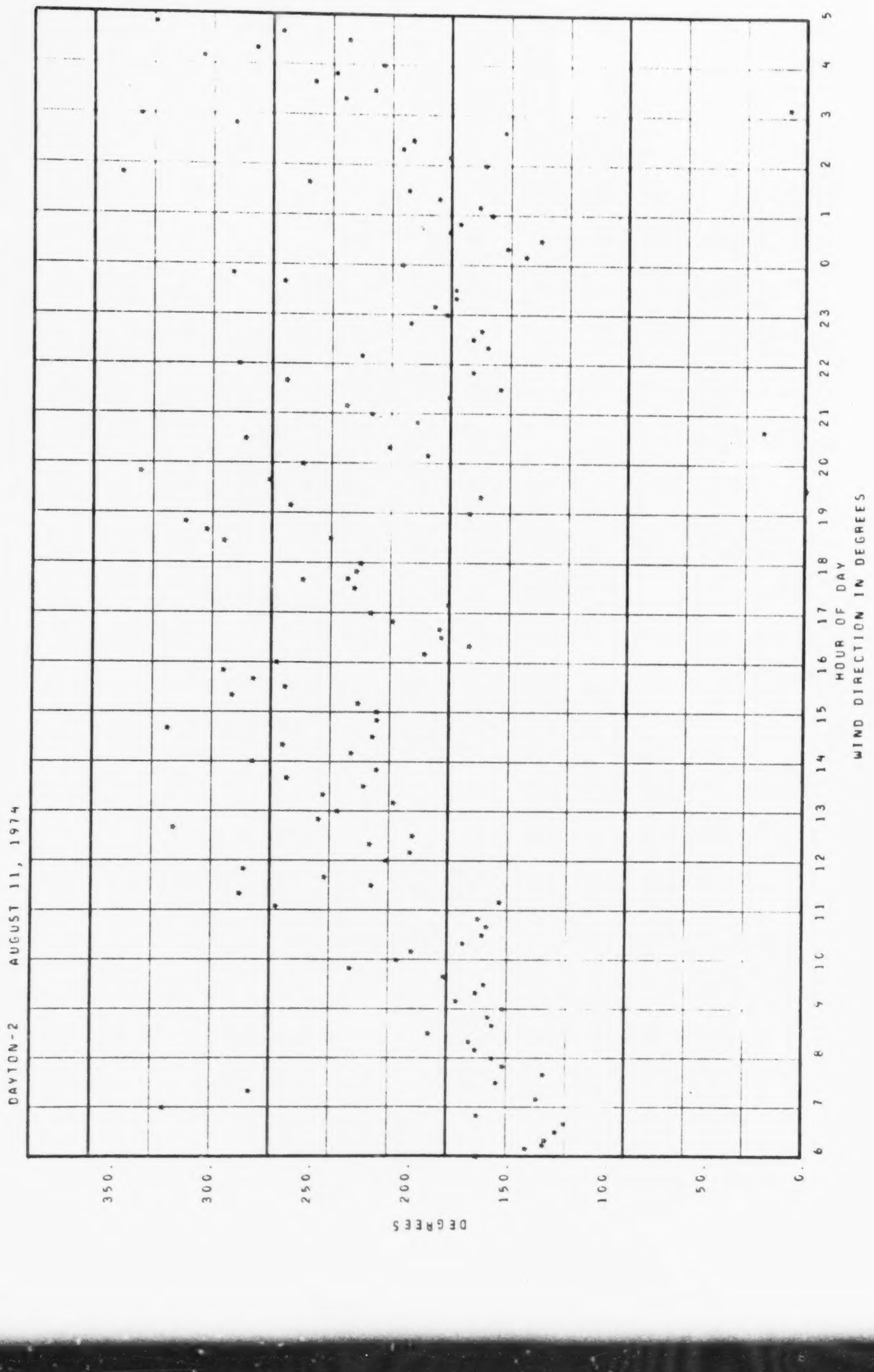


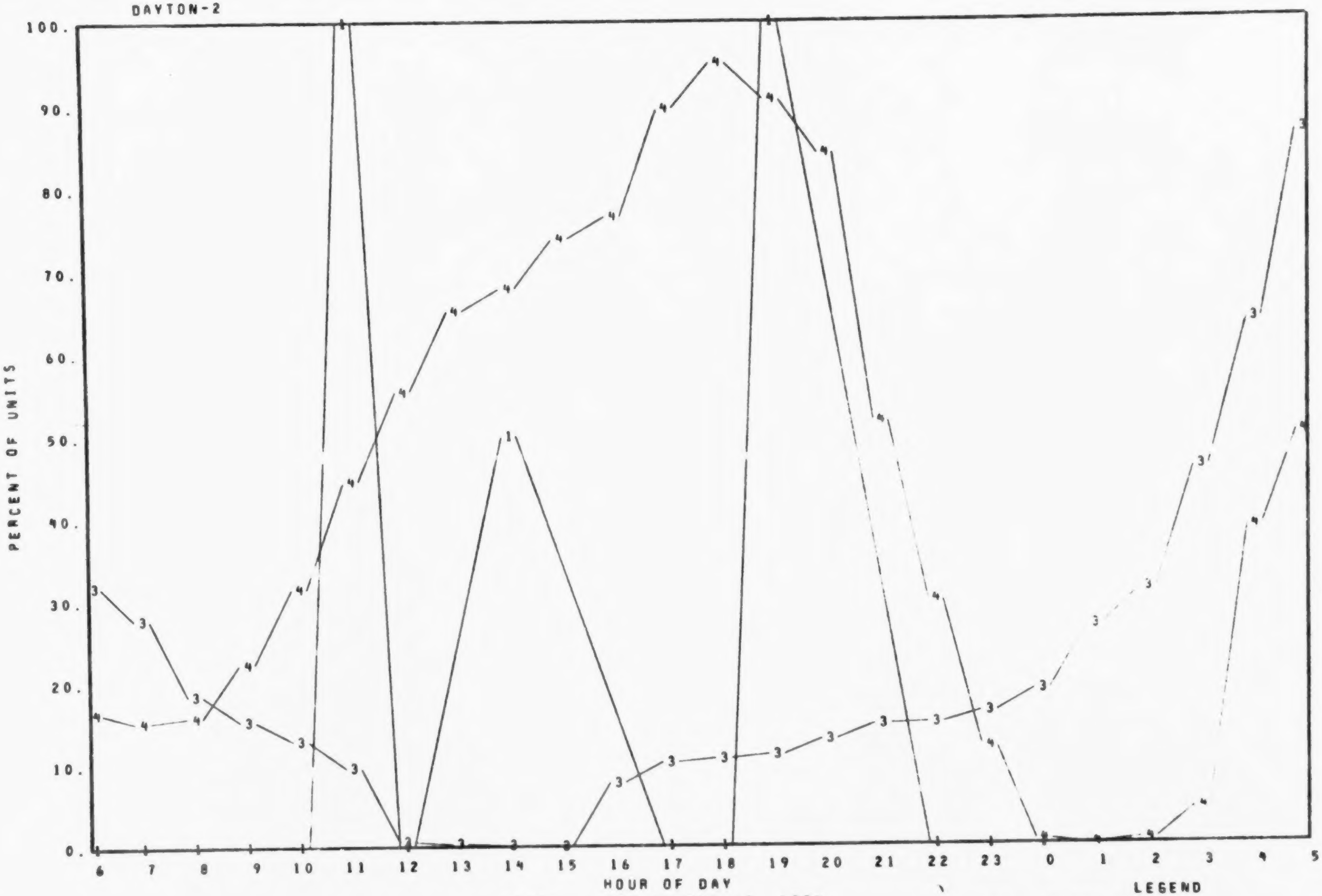
GRAPH 4 FOR AUGUST 11, 1974

LEGEND
1--AMMONIA 0.000 PPM
2--SULFUR DIOXIDE [illegible] PPM
3--[illegible] [illegible] PPM
[illegible] 2.000 PPM



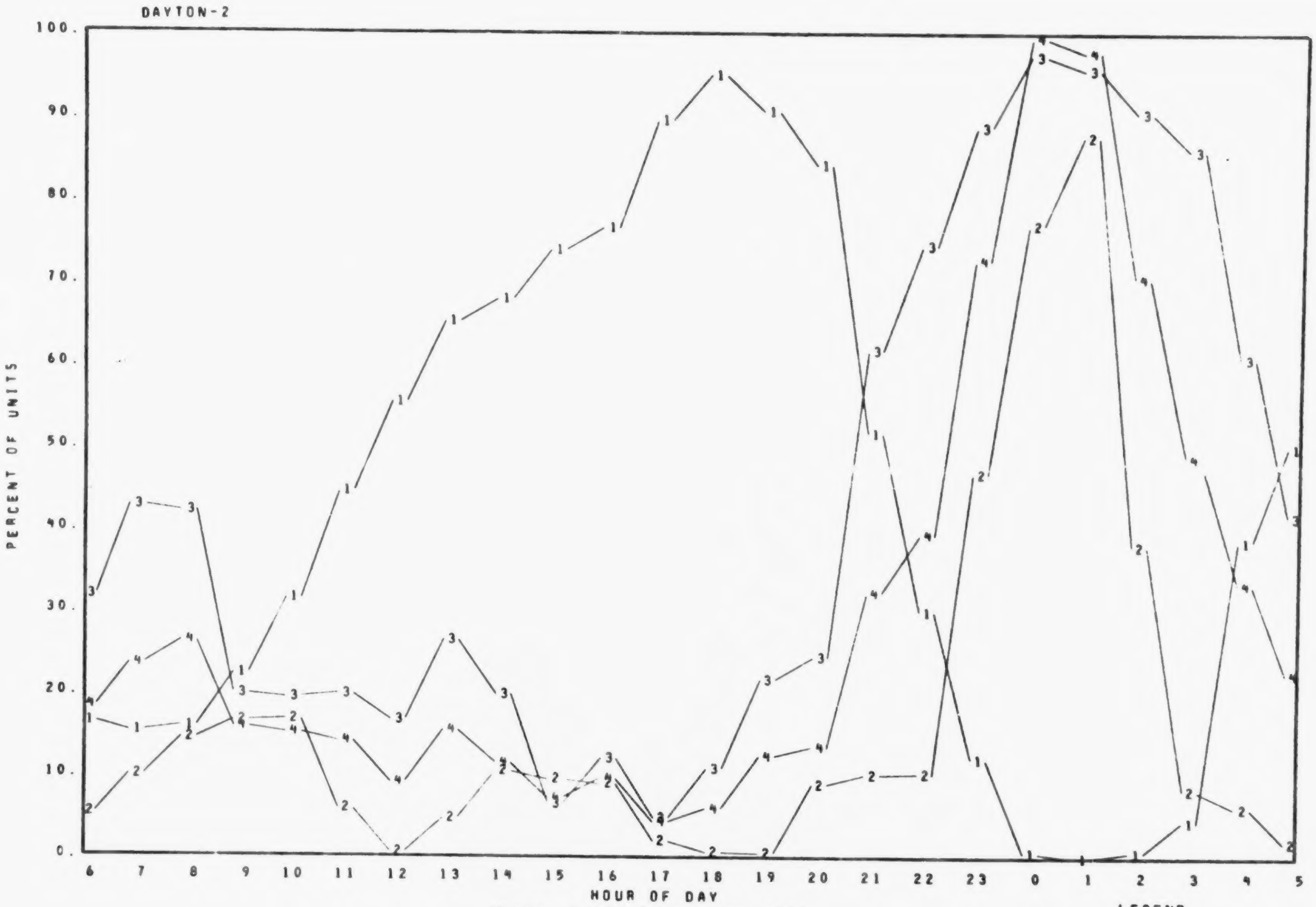
GRAPH 5 FOR AUGUST 11, 1974


DAYTON-2 AUGUST 11, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350. 300. 250. 200. 150. 100. 50. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5



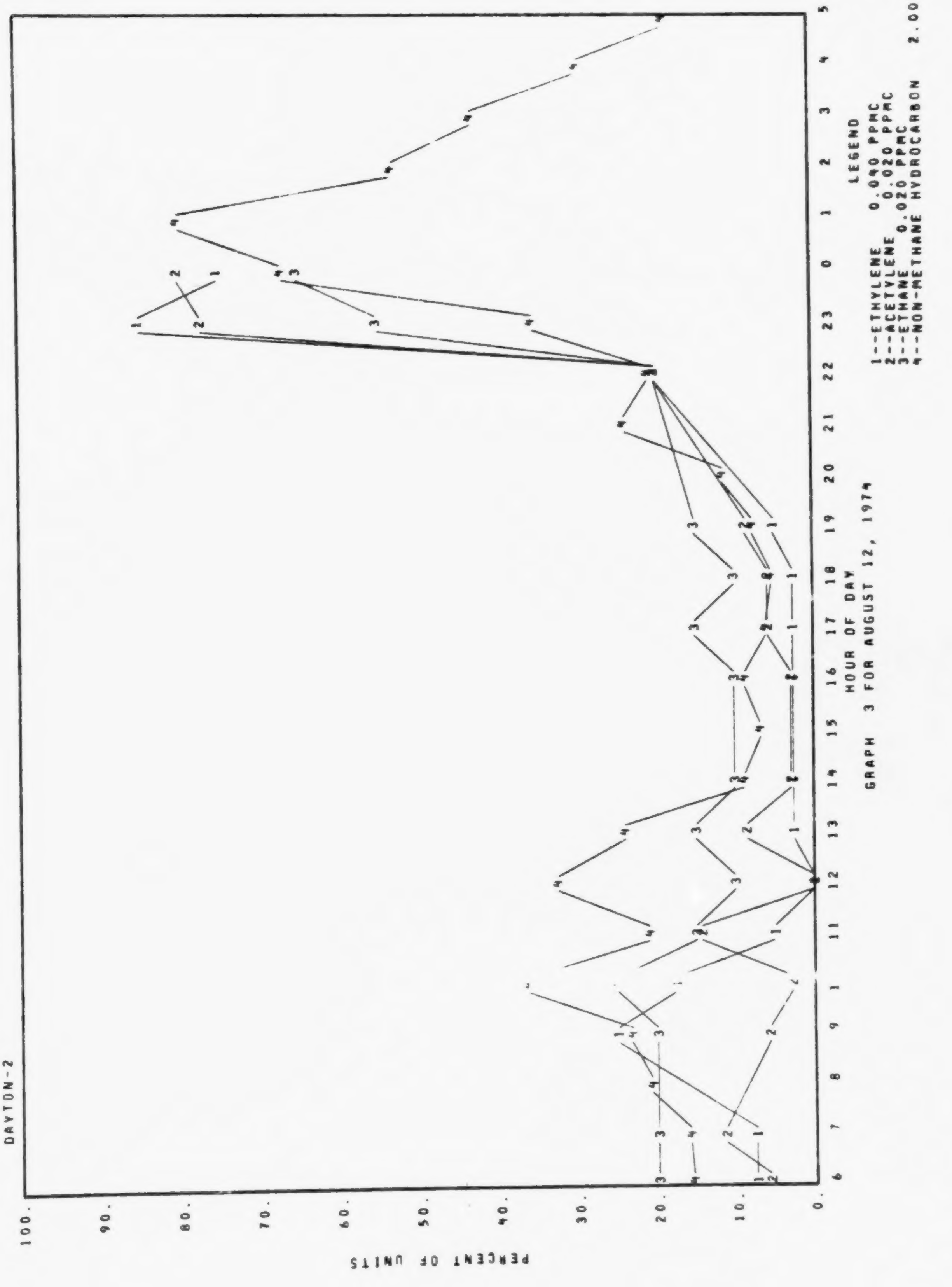
GRAPH 1 FOR AUGUST 12, 1974

LEGEND
1--PAN 0.002 PPM
2--NITRIC ACID 0.000 PPM
3--LIGHT SCATTERING 7.000 (10**-4)/M
4--OZONE 0.070 PPM

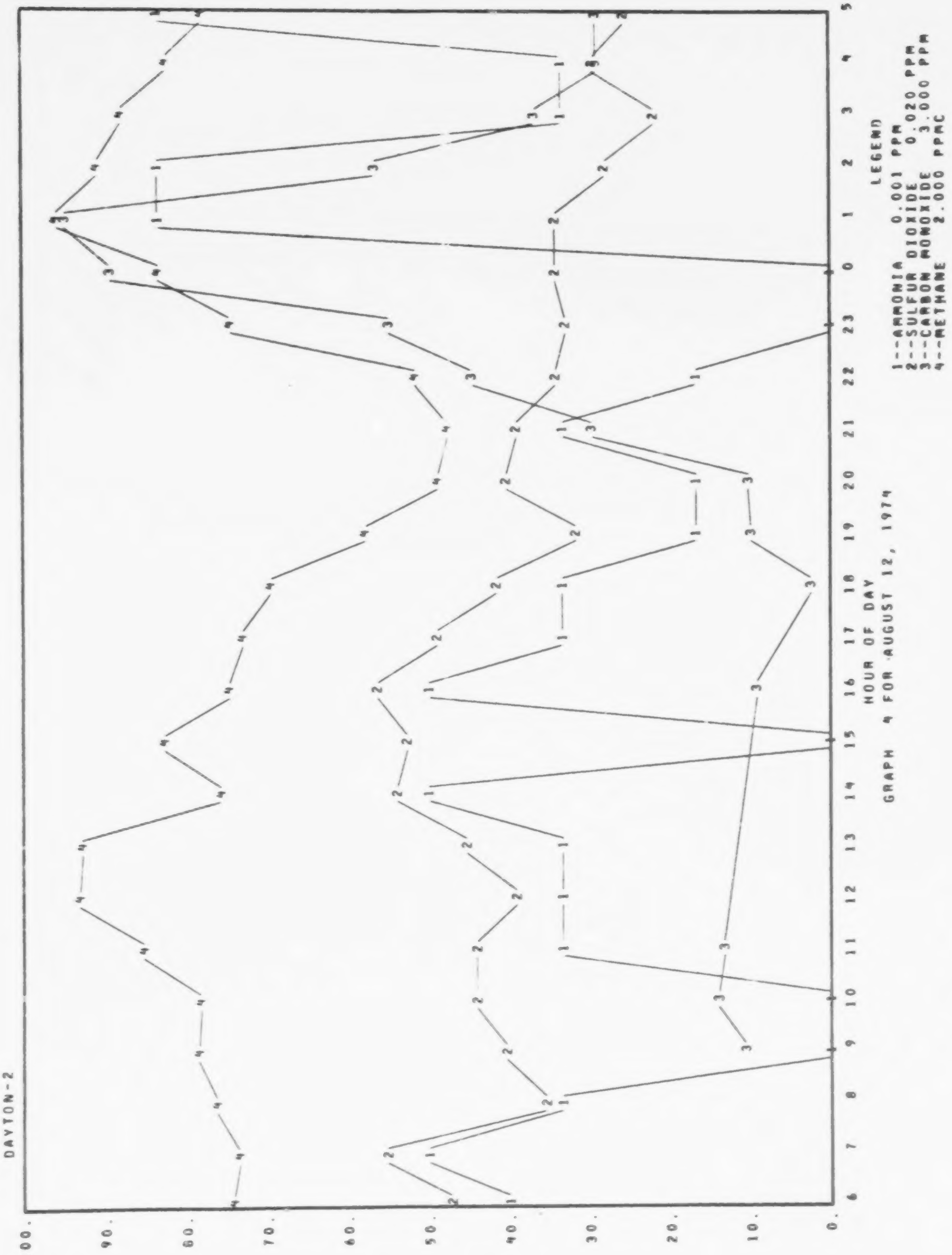


GRAPH 2 FOR AUGUST 12, 1974

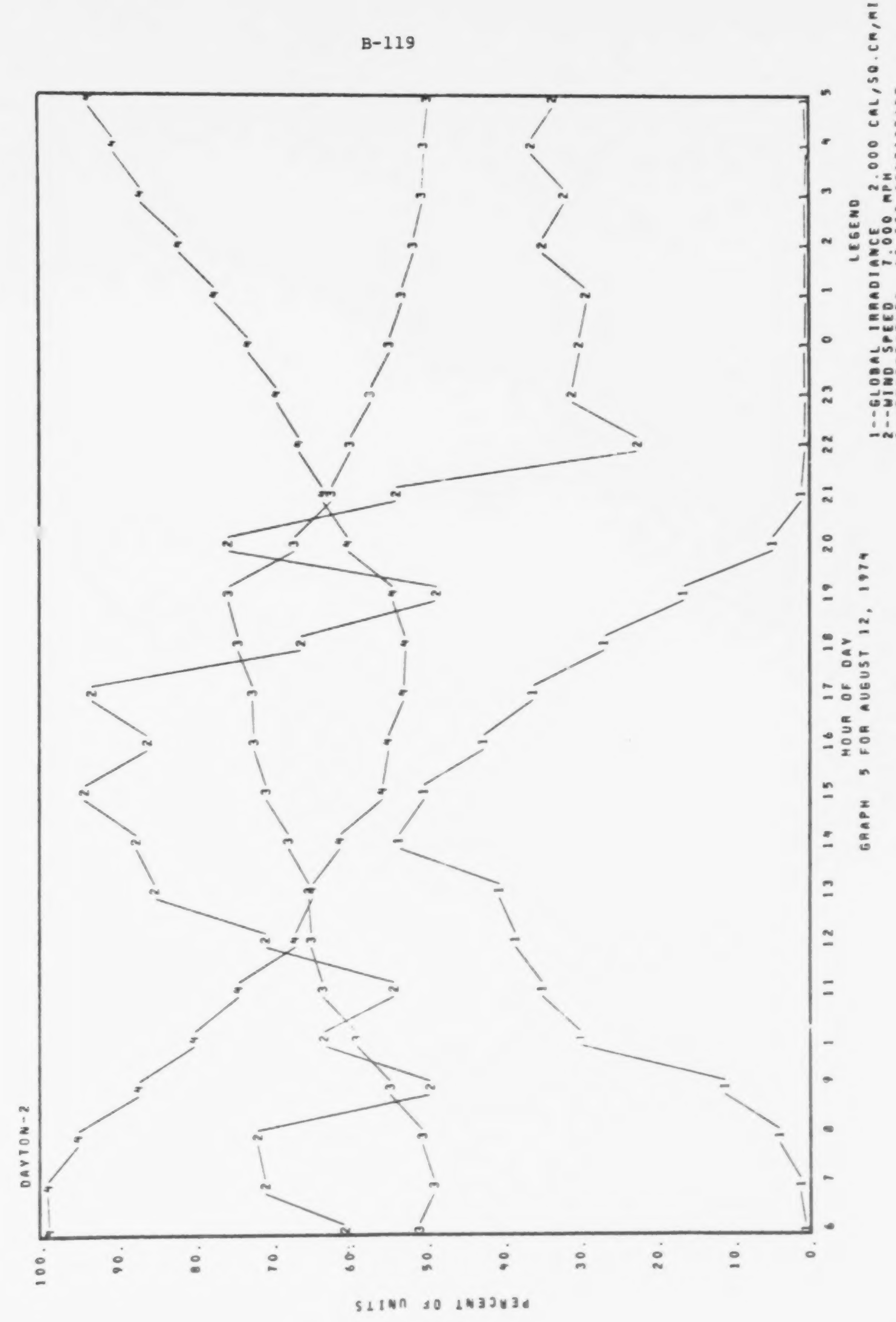
LEGEND
1--OZONE 0.070 PPM
2--NITRIC OXIDE 0.050 PPM
3--NITROGEN DIOXIDE 0.040 PPM
4--NITROGEN OXIDES 0.080 PPM

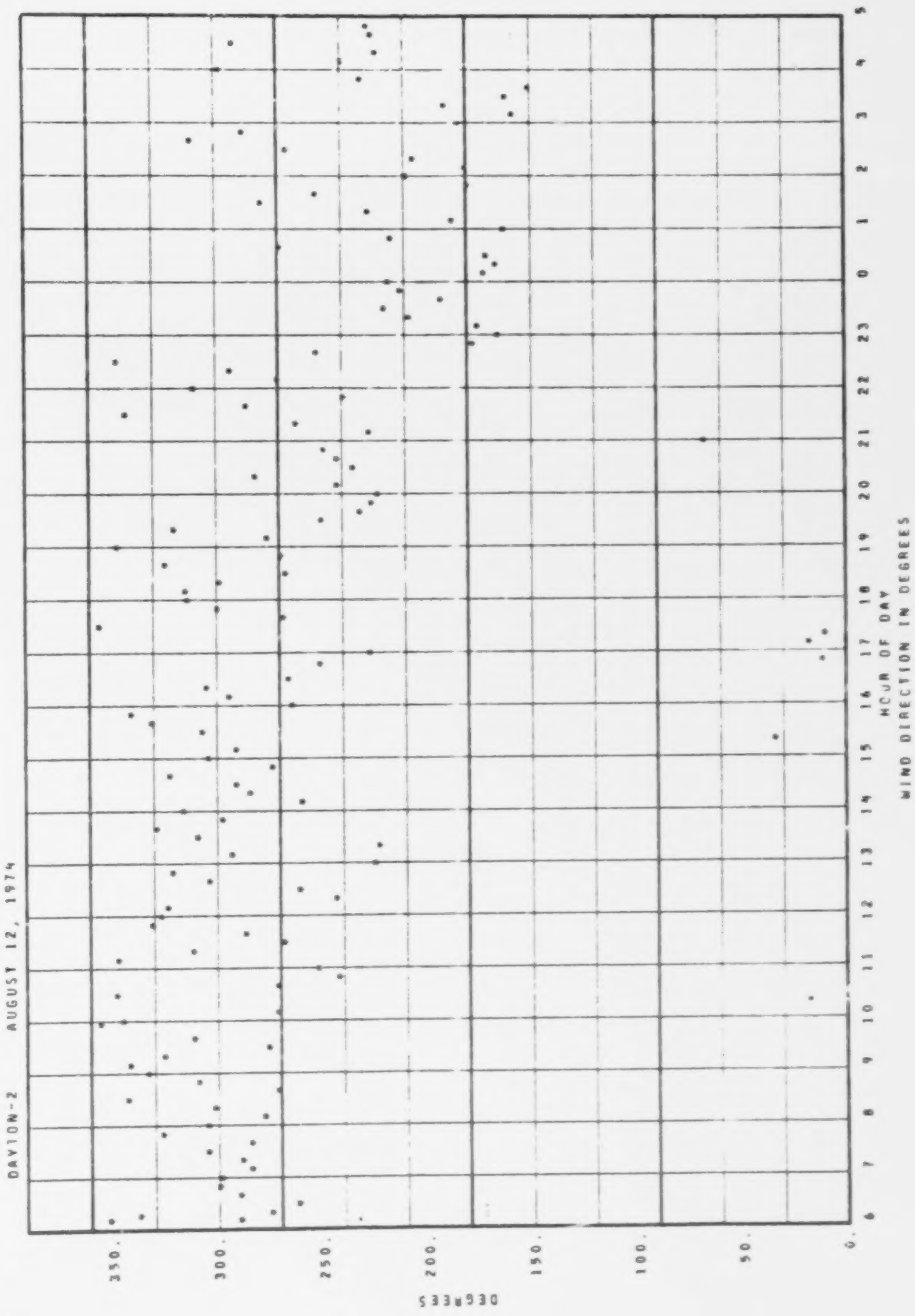


GRAPH 3 FOR AUGUST 12, 1974



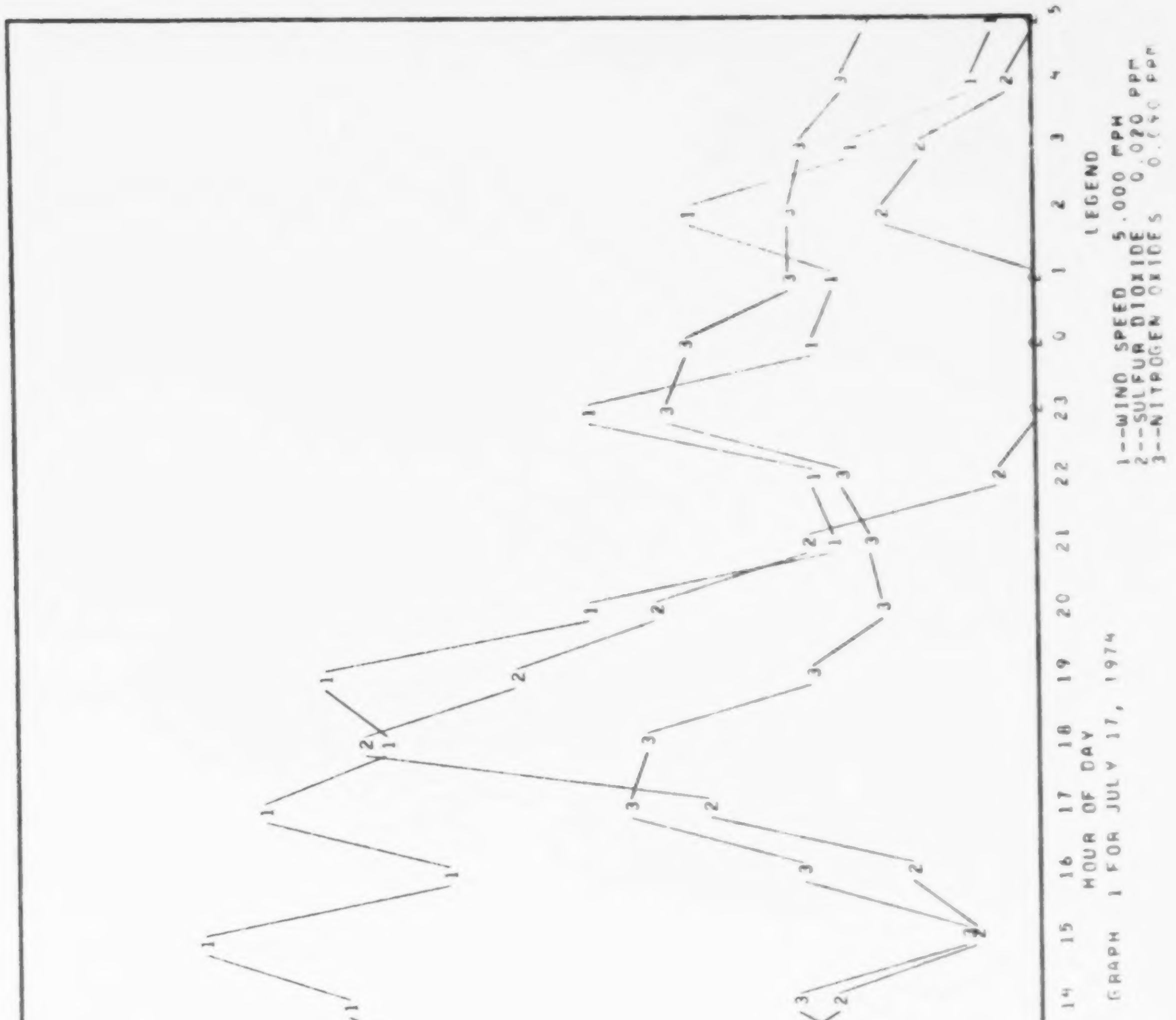
GRAPH 4 FOR AUGUST 12, 1974

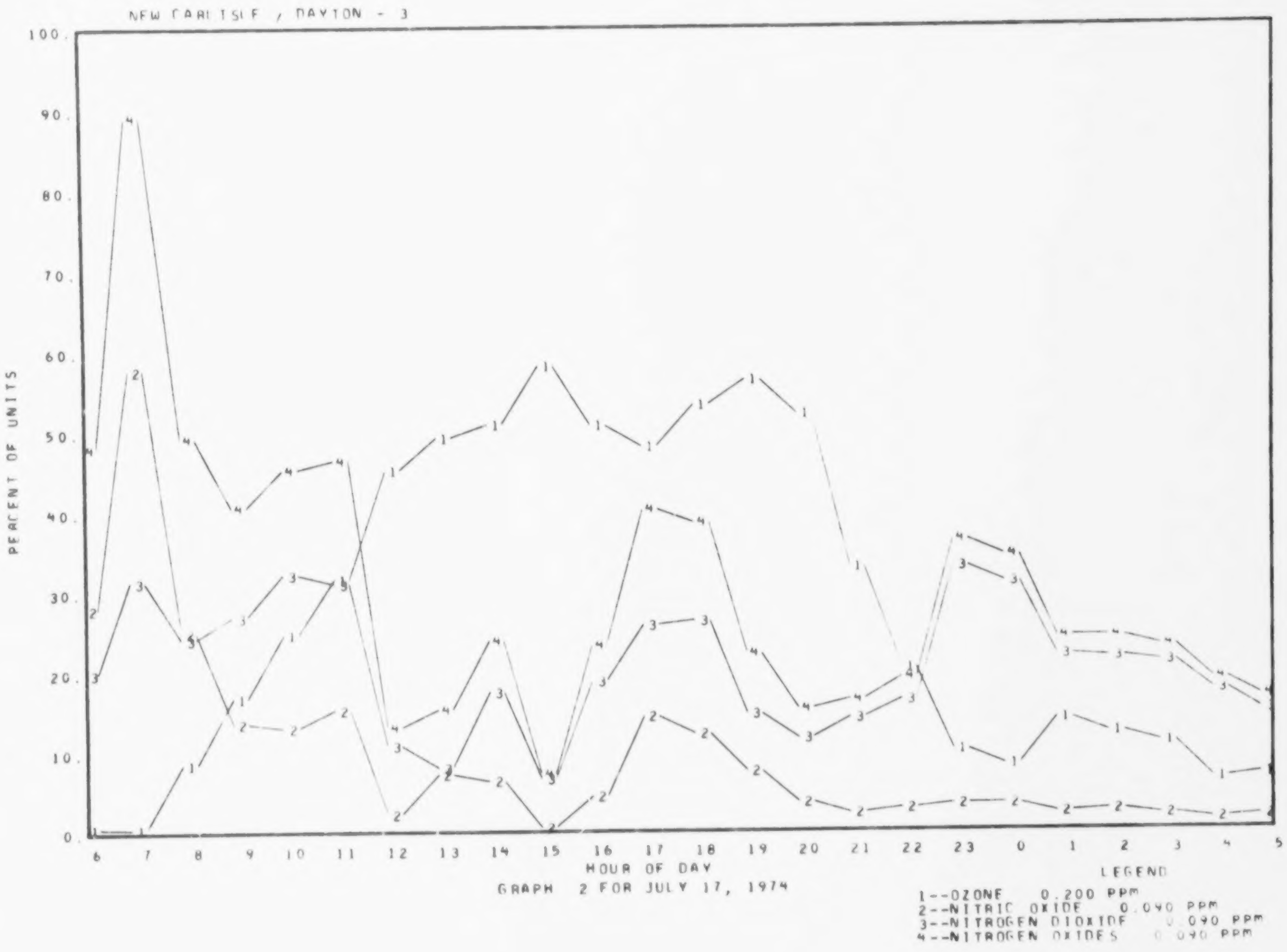

DAYTON-2
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 5 FOR AUGUST 12, 1974
LEGEND
1--GLOBAL IRRADIANCE 2.000 CAL/SQ.CM/MIN
2--WIND SPEED 7.000 MPH
3--TEMPERATURE 40.000 CENTIGRADE
4--RELATIVE HUMIDITY 90.000 PERCENT


DAYTON-2
AUGUST 12, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5

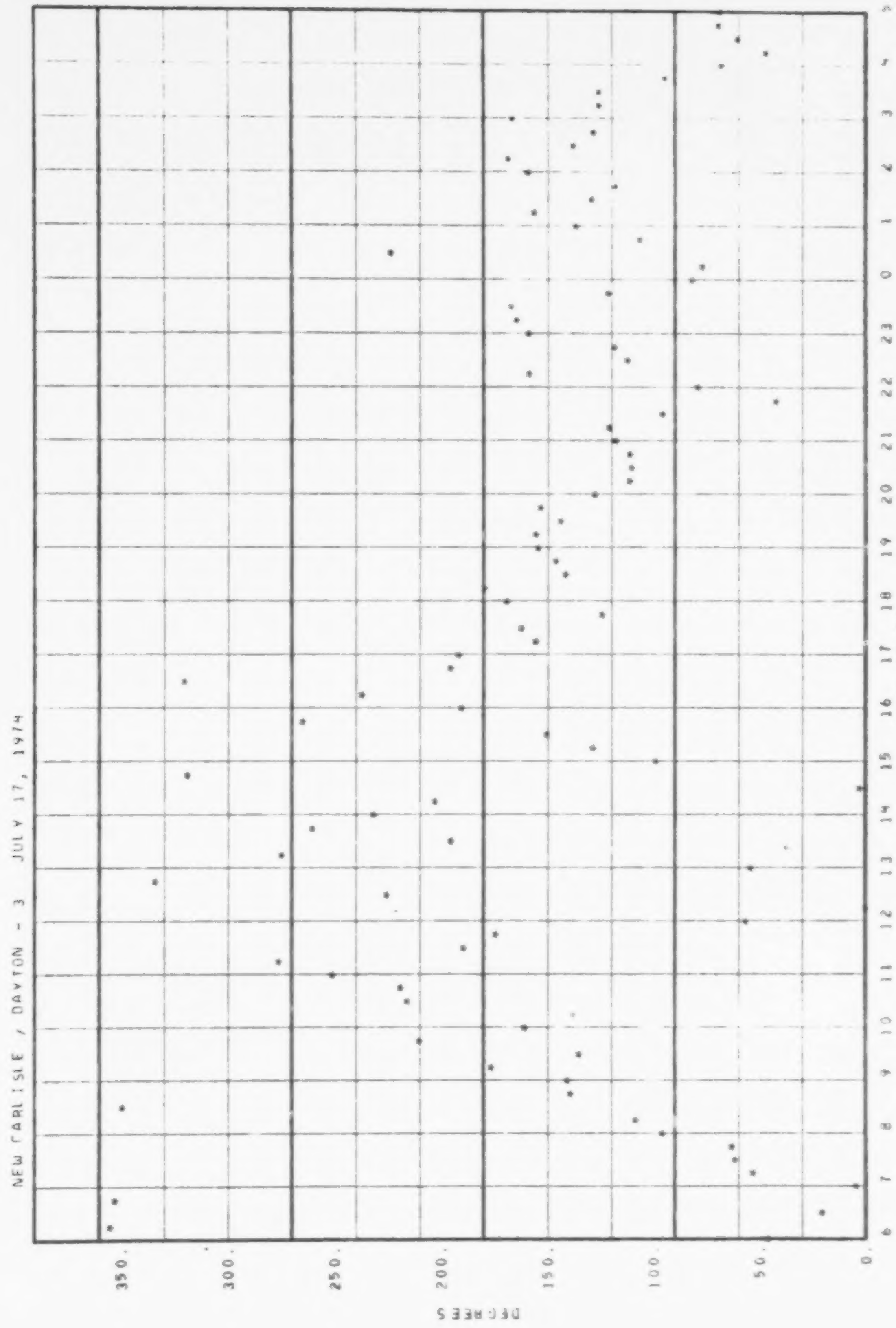
APPENDIX C

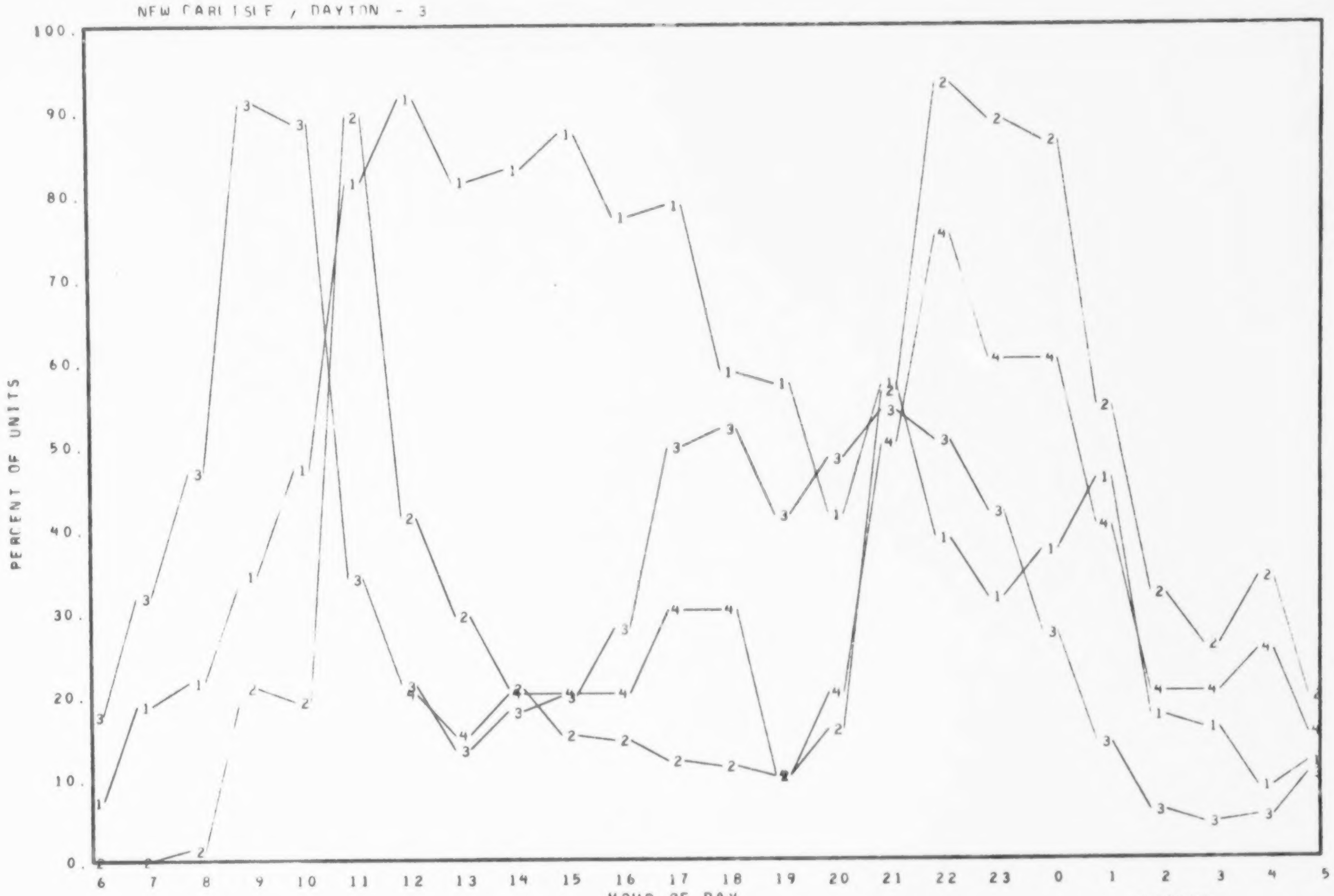
NEW CARLISLE (SITE 3) RESULTS


NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 1 FOR JULY 17, 1974
LEGEND
1--WIND SPEED 5.000 MPH
2--SULFUR DIOXIDE 0.020 PPM
3--NITROGEN OXIDES



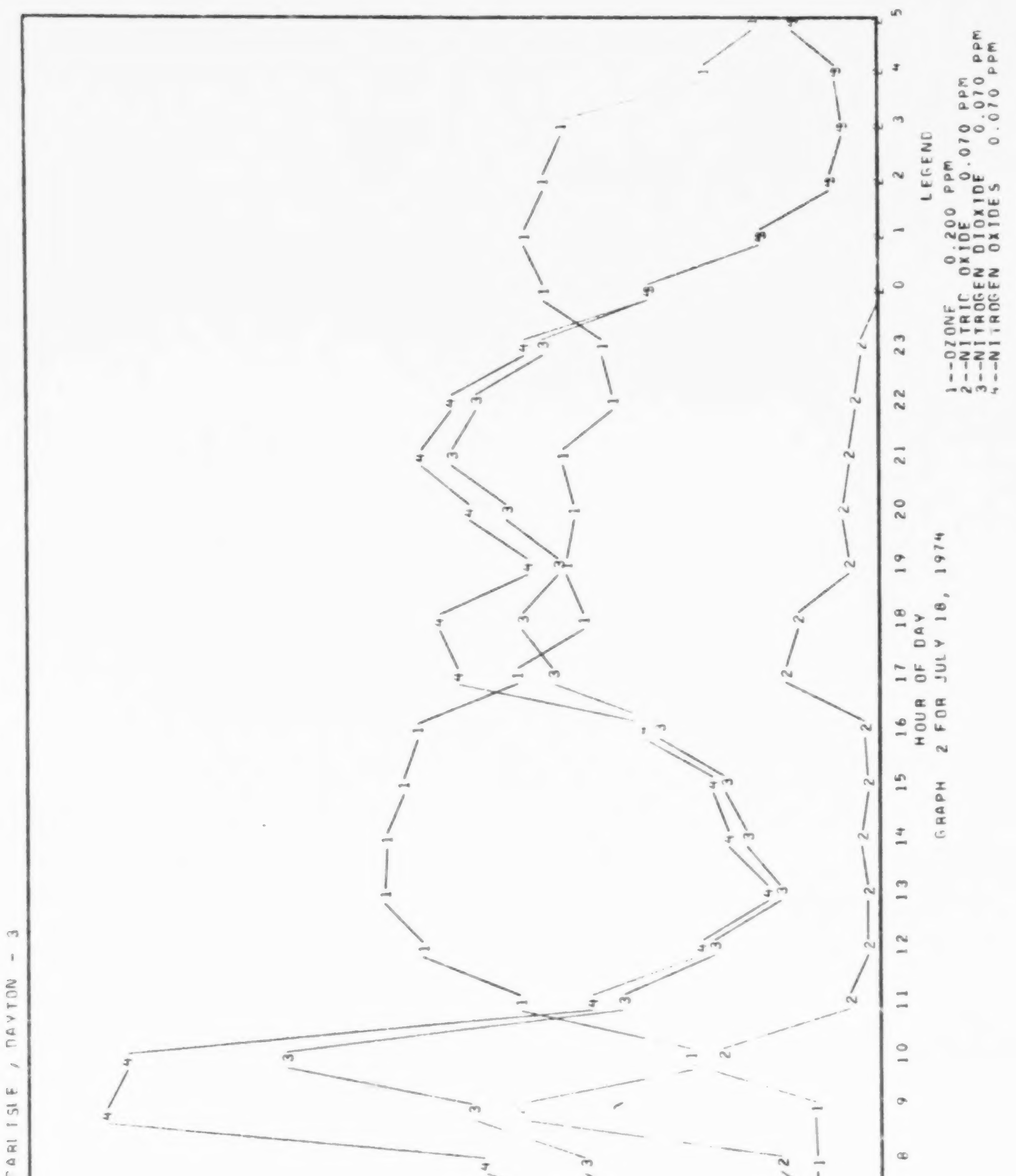
GRAPH 2 FOR JULY 17, 1974

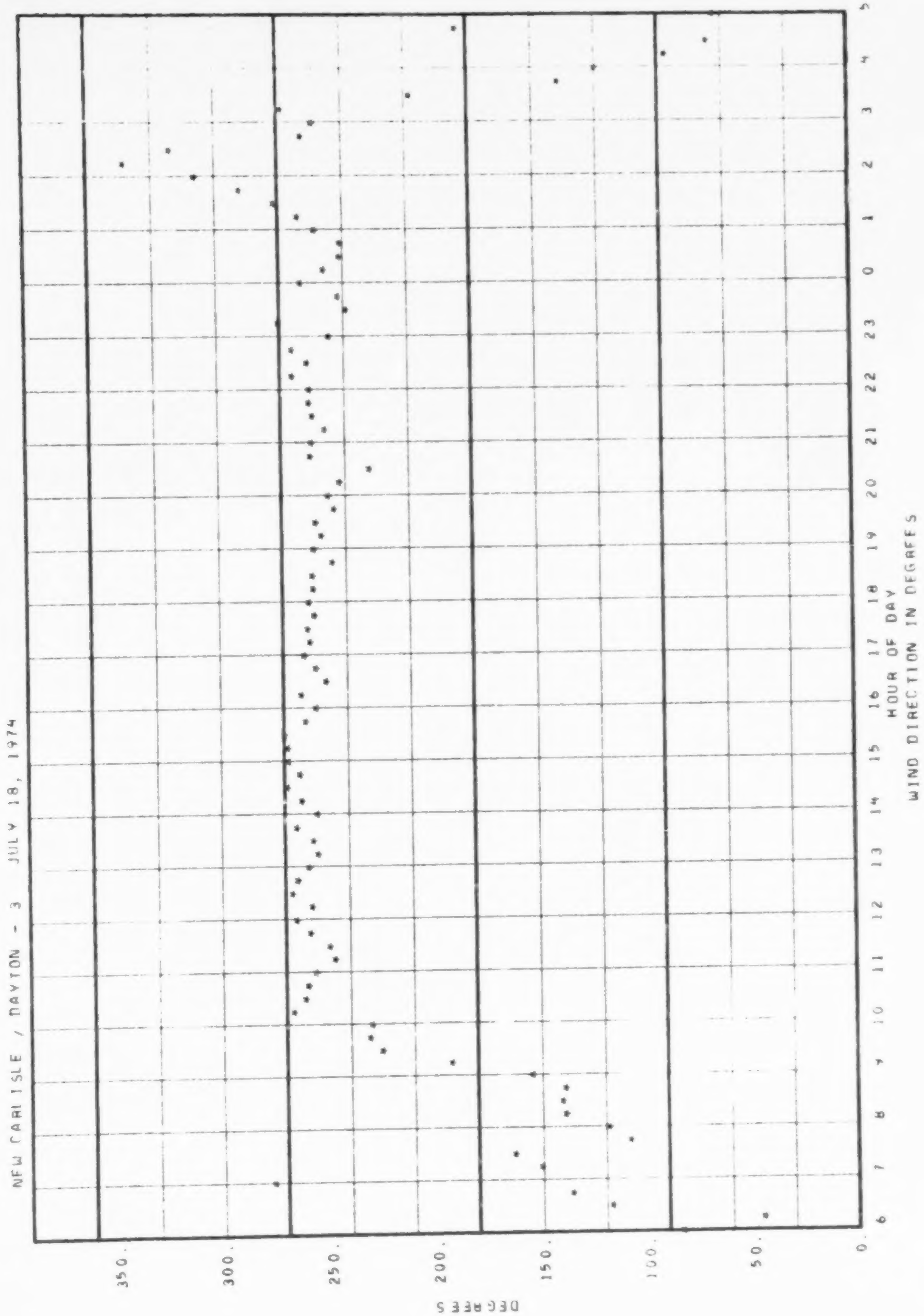

NEW CARLISLE / DAYTON - 3 JULY 17, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

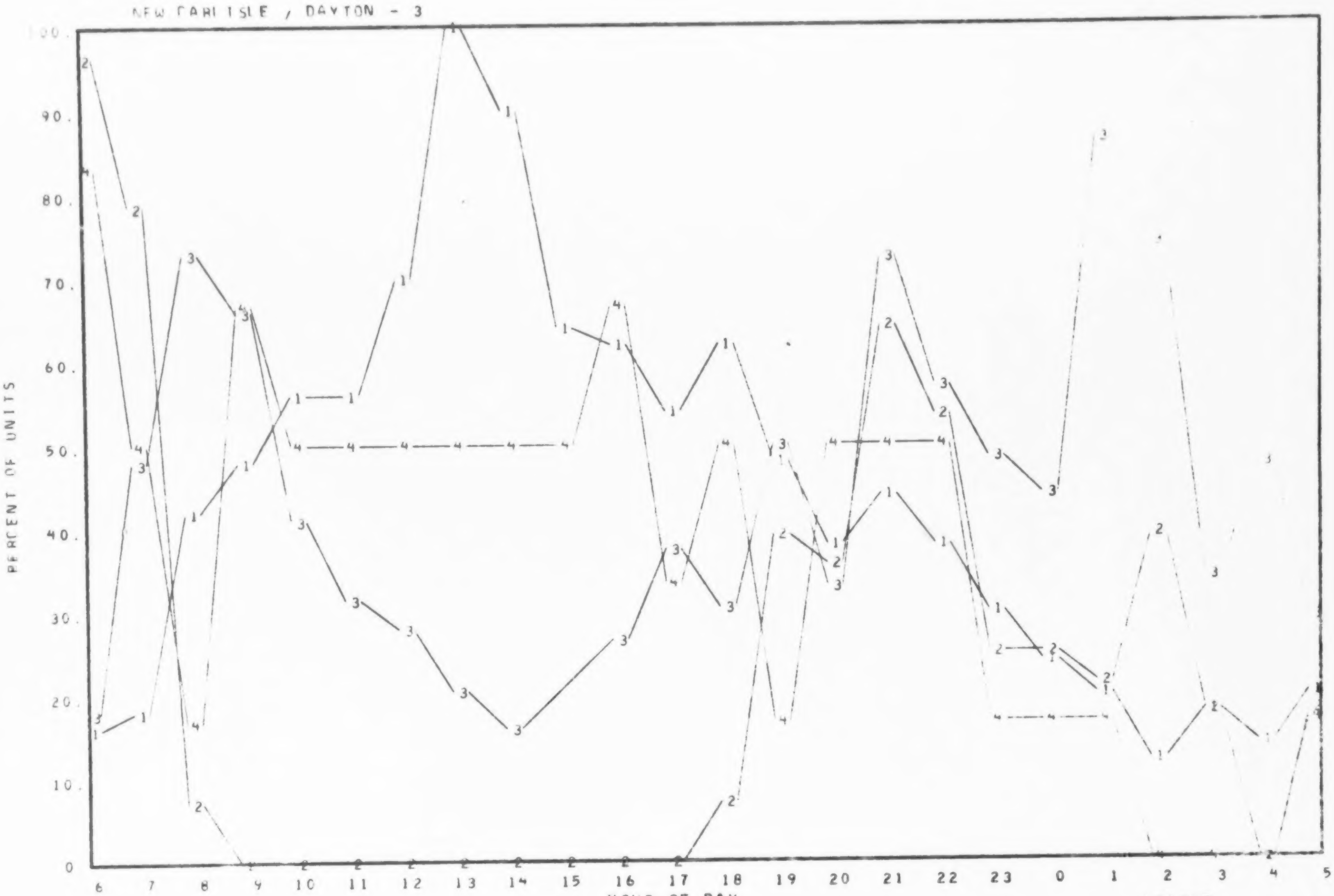


GRAPH 1 FOR JULY 18, 1974

LEGEND
1--WIND SPEED 7.000 MPH
2--SULFUR DIOXIDE 0.040 PPM
3--NITROGEN OXIDES 0.070 PPM
4--NITRIC ACID 0.020 PPM

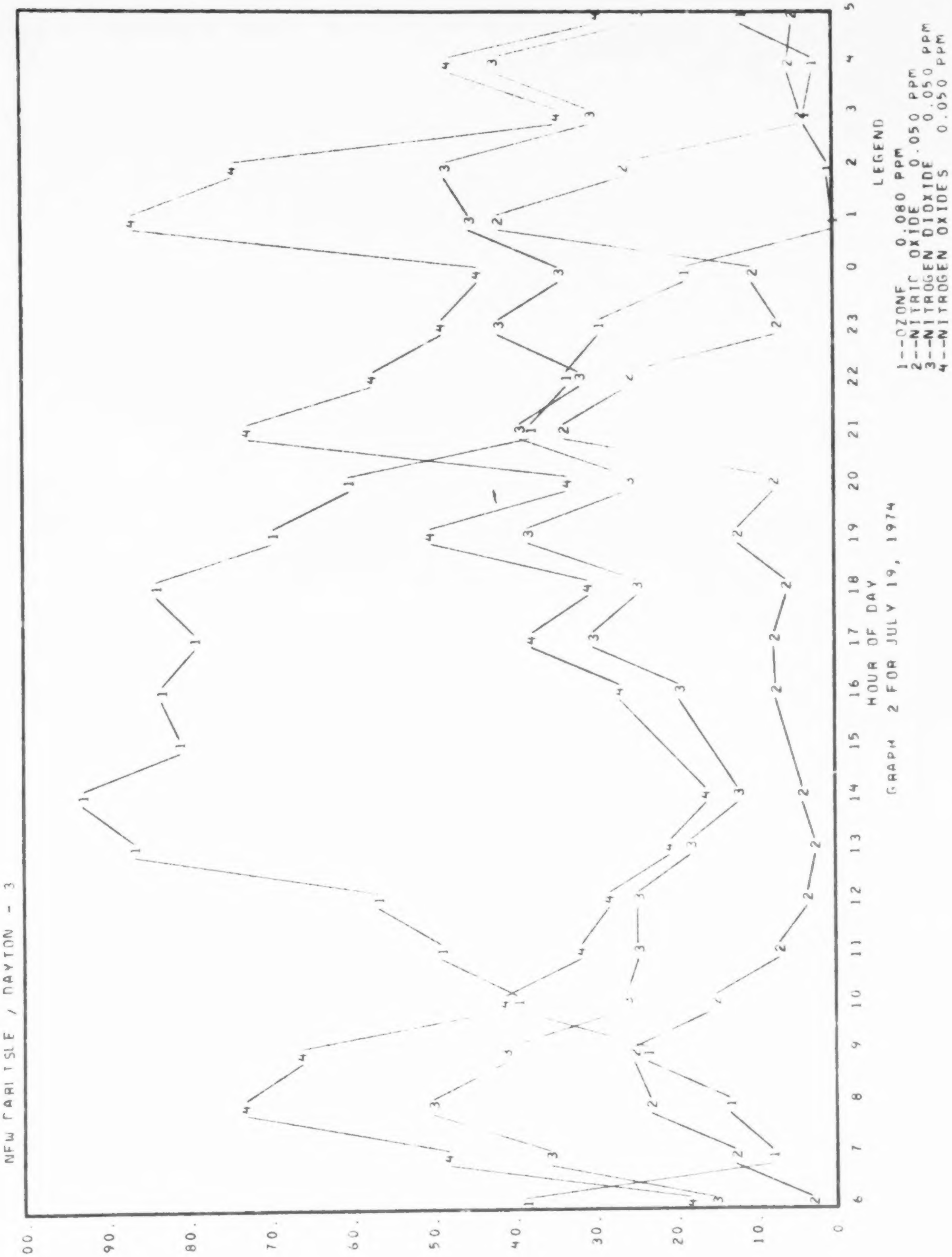

NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR JULY 18, 1974
LEGEND
1--OZONE 0.200 PPM
2--NITRIC OXIDE 0.070 PPM
3--NITROGEN DIOXIDE 0.070 PPM
4--NITROGEN OXIDES 0.070 PPM

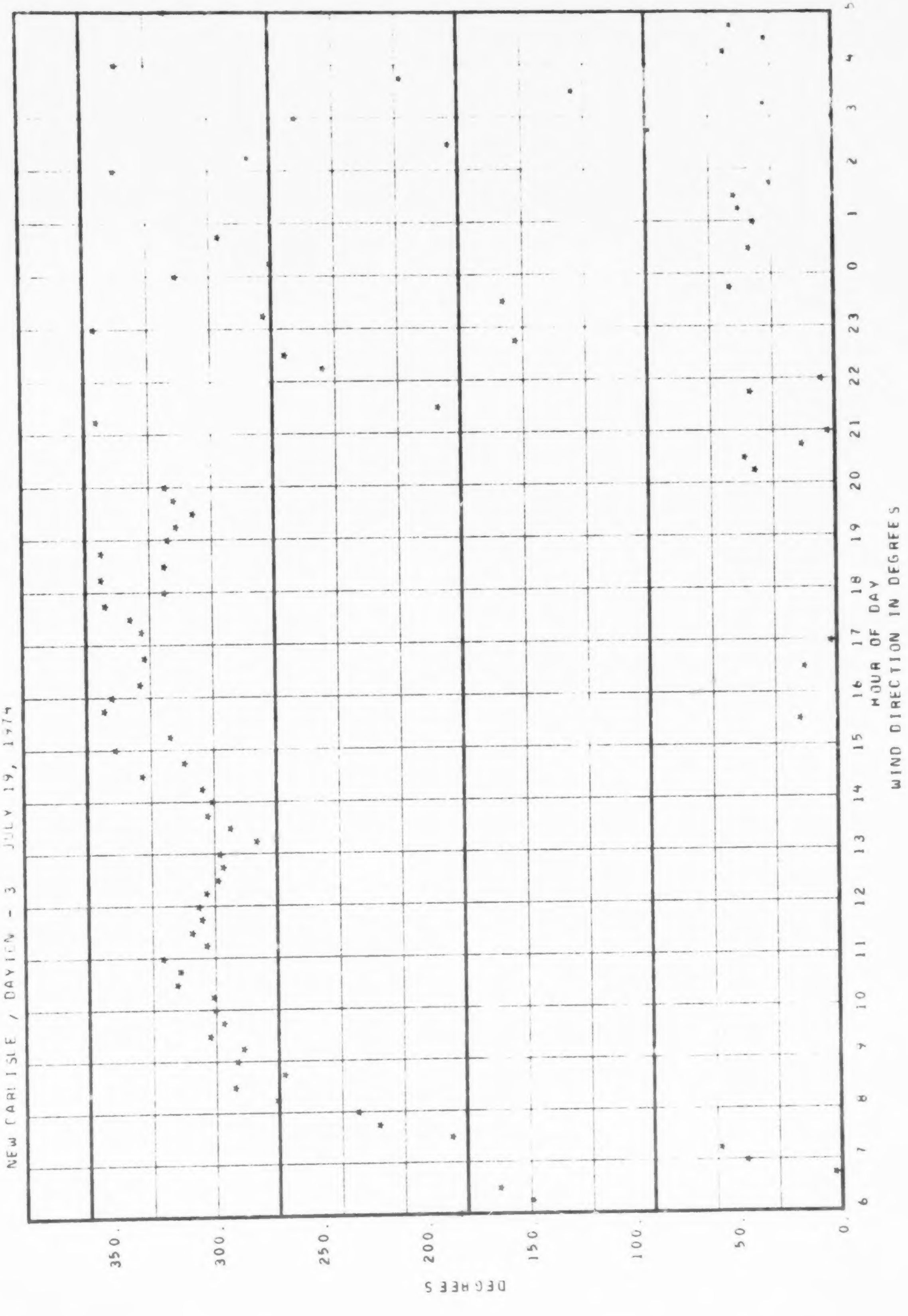

NEW CARLISLE / DAYTON - 3 JULY 18, 1974
350.
300.
250.
200.
150.
100.
50.
0.
DEGREES
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
WIND DIRECTION IN DEGREES

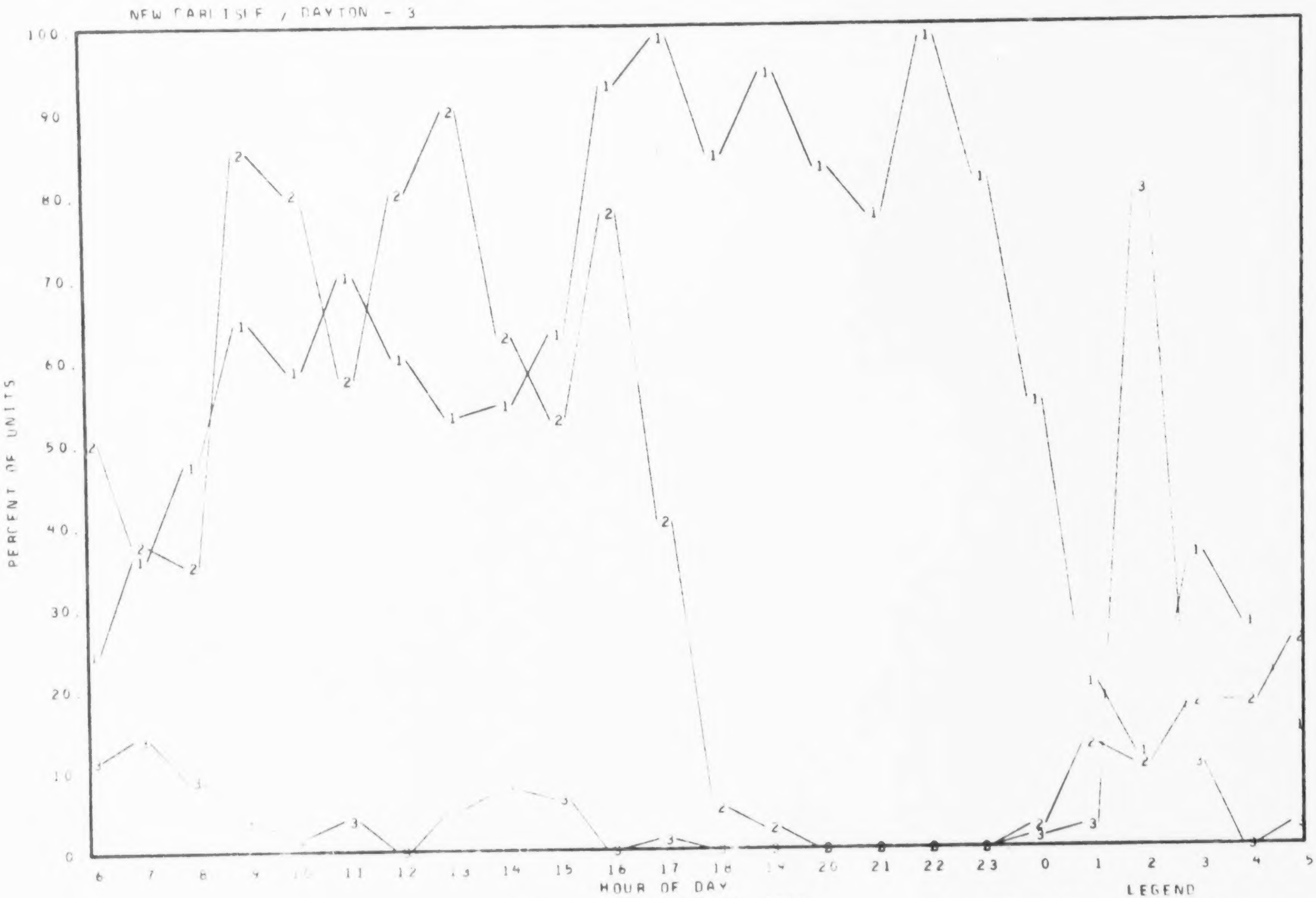


GRAPH 1 FOR JULY 19, 1974

LEGEND
1--WIND SPEED 5.000 MPH
2--SULFUR DIOXIDE 0.007 PPM
3--NITROGEN OXIDES 0.050 PPM
4--NITRIC ACID 0.006 PPM


NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
100. 90. 80. 70. 60. 50. 40. 30. 20. 10. 0
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR JULY 19, 1974
LEGEND
1--OZONE 0.080 PPM
2--NITRIC OXIDE 0.050 PPM
3--NITROGEN DIOXIDE 0.050 PPM
4--NITROGEN OXIDES 0.050 PPM

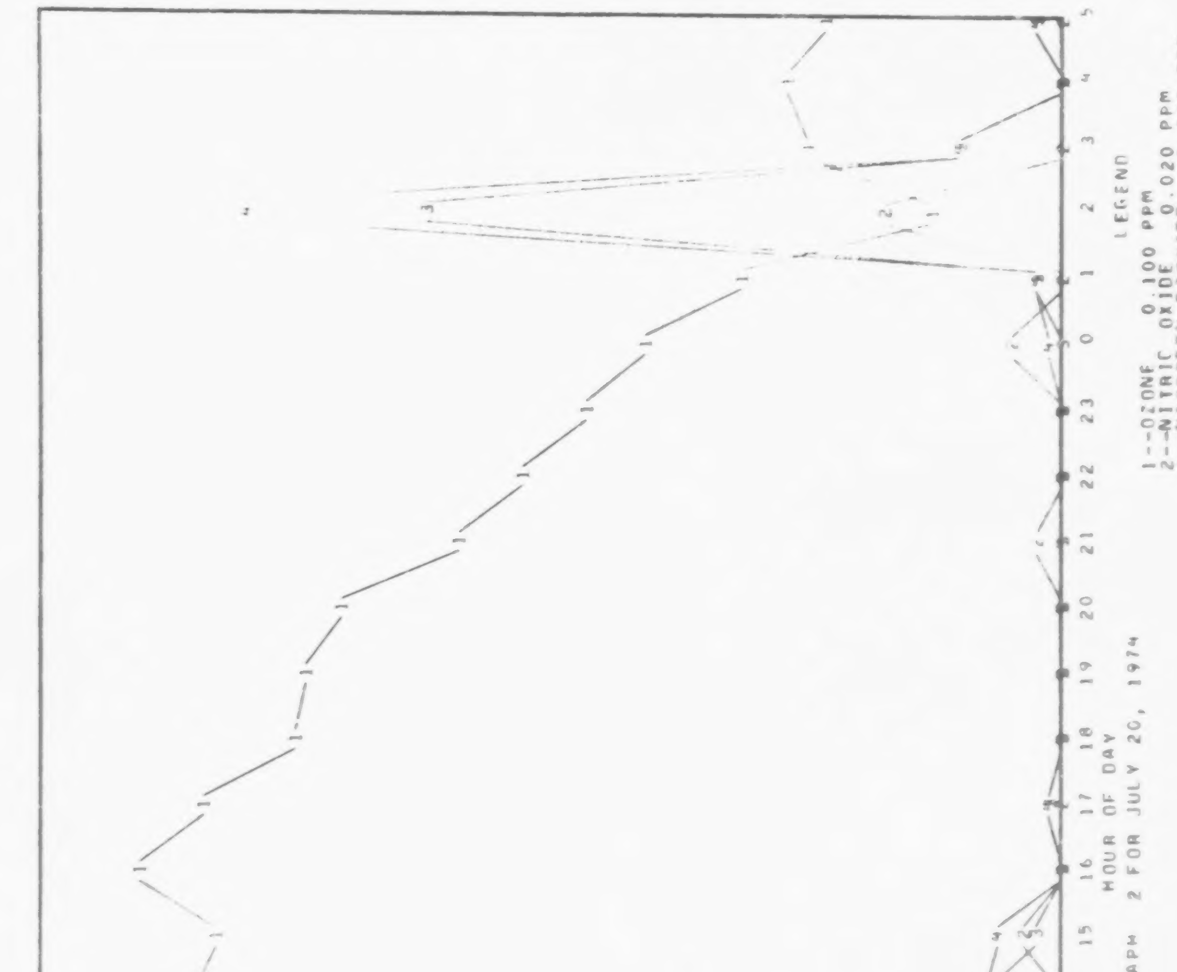

NEW CARLISLE / DAYTON - 3 JULY 19, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

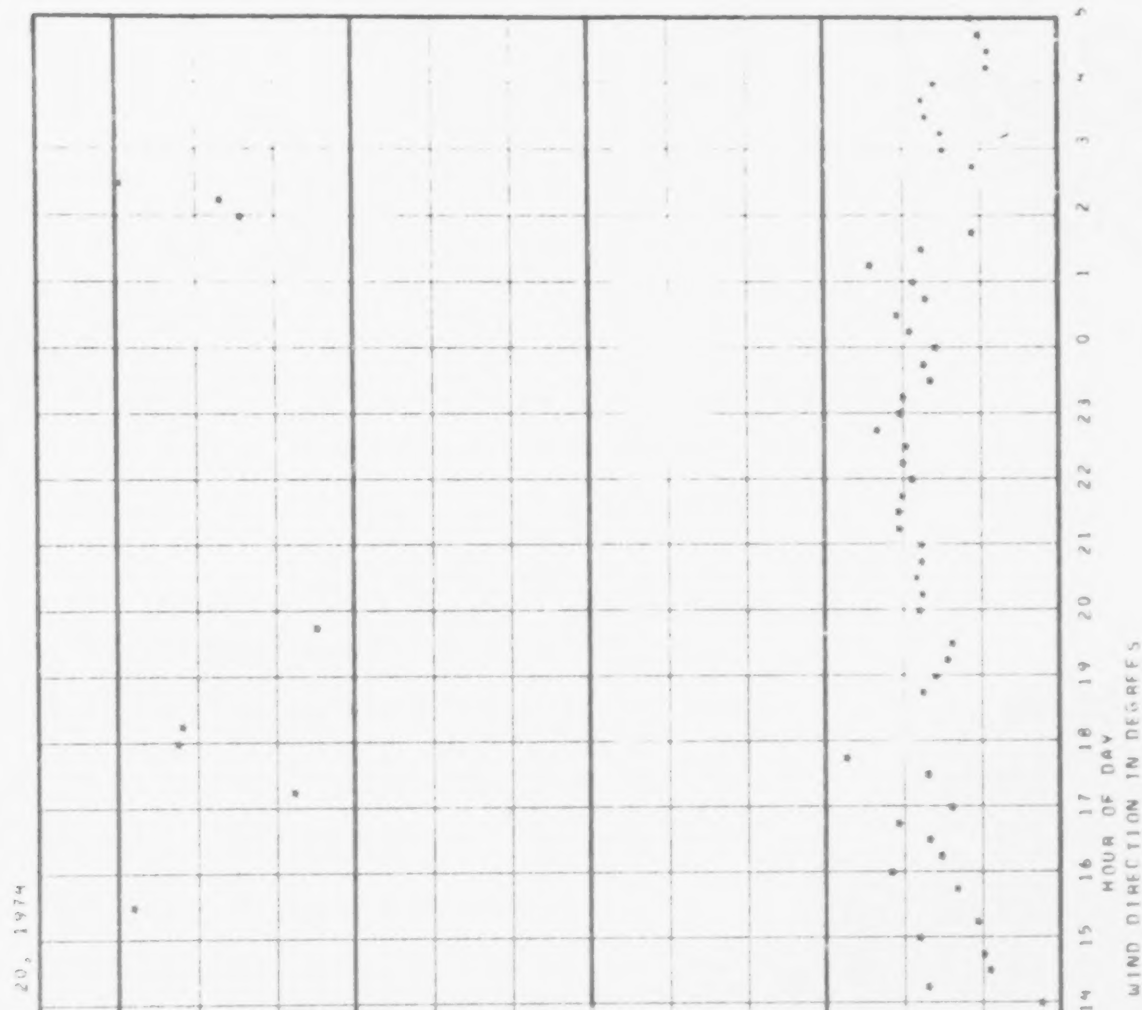


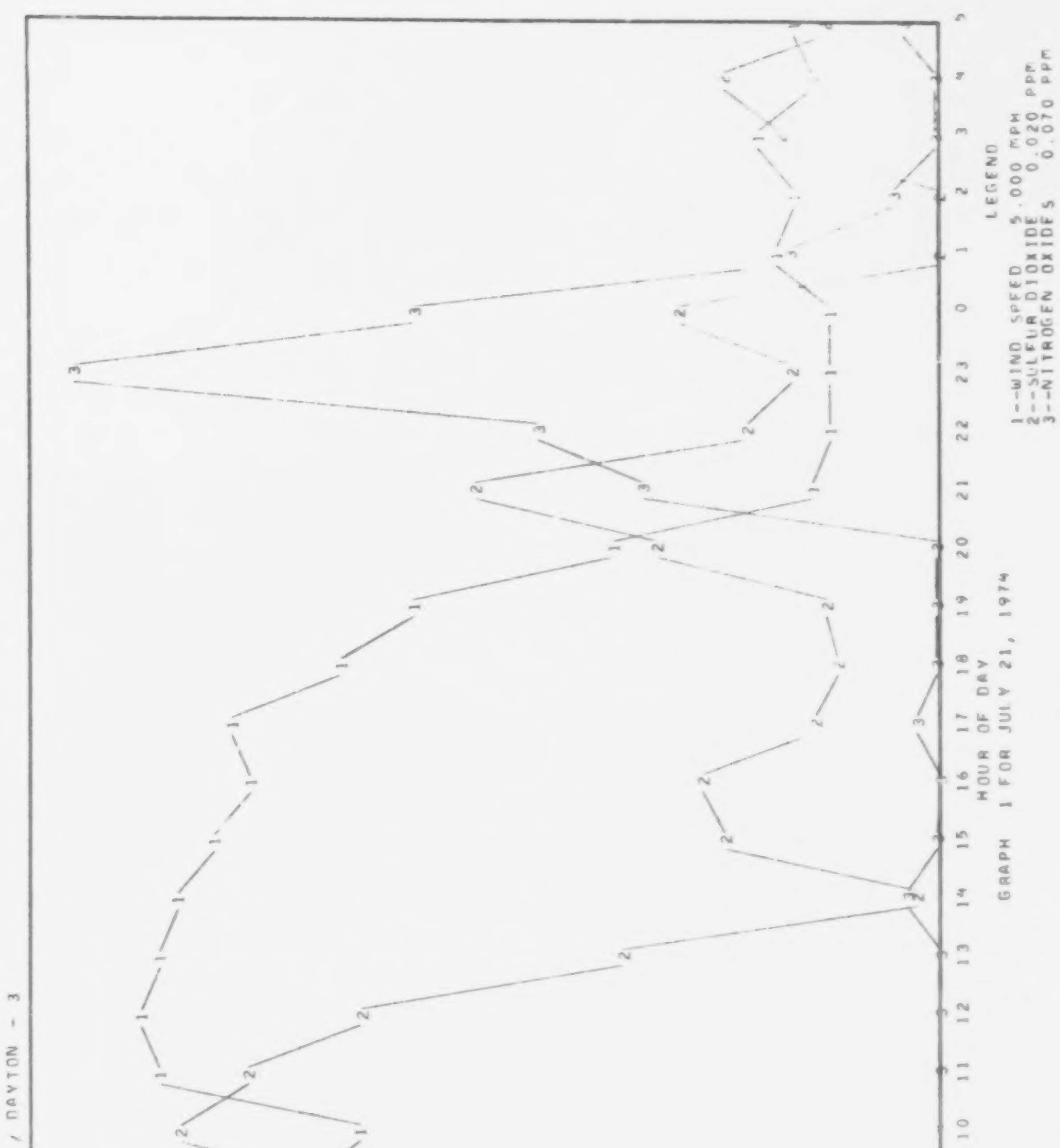
GRAPH 1 FOR JULY 20, 1974

LEGEND

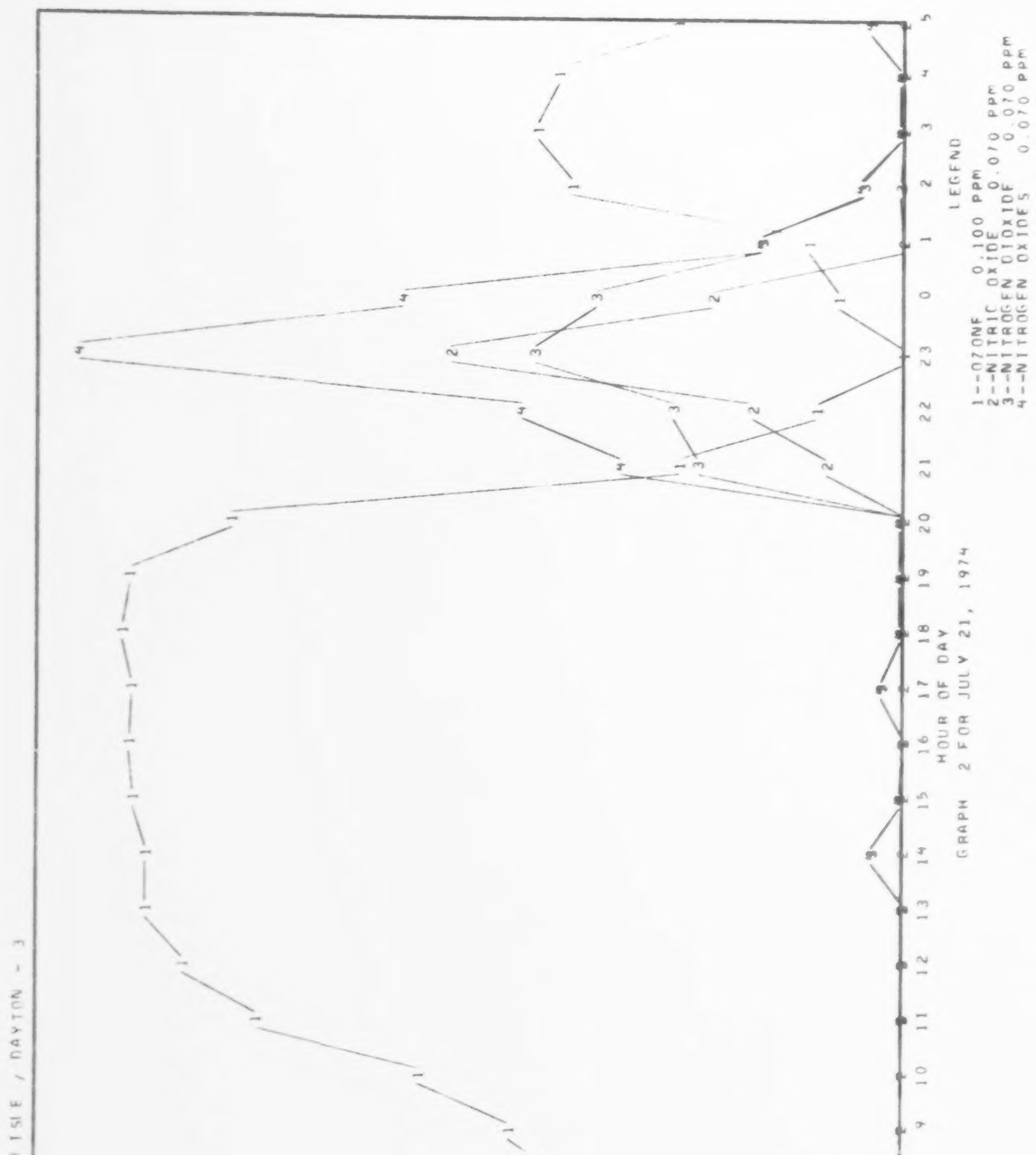
1--WIND SPEED 7.000 MPH
2--SULFUR DIOXIDE 0.010 PPM
3--NITROGEN OXIDES 0.020 PPM

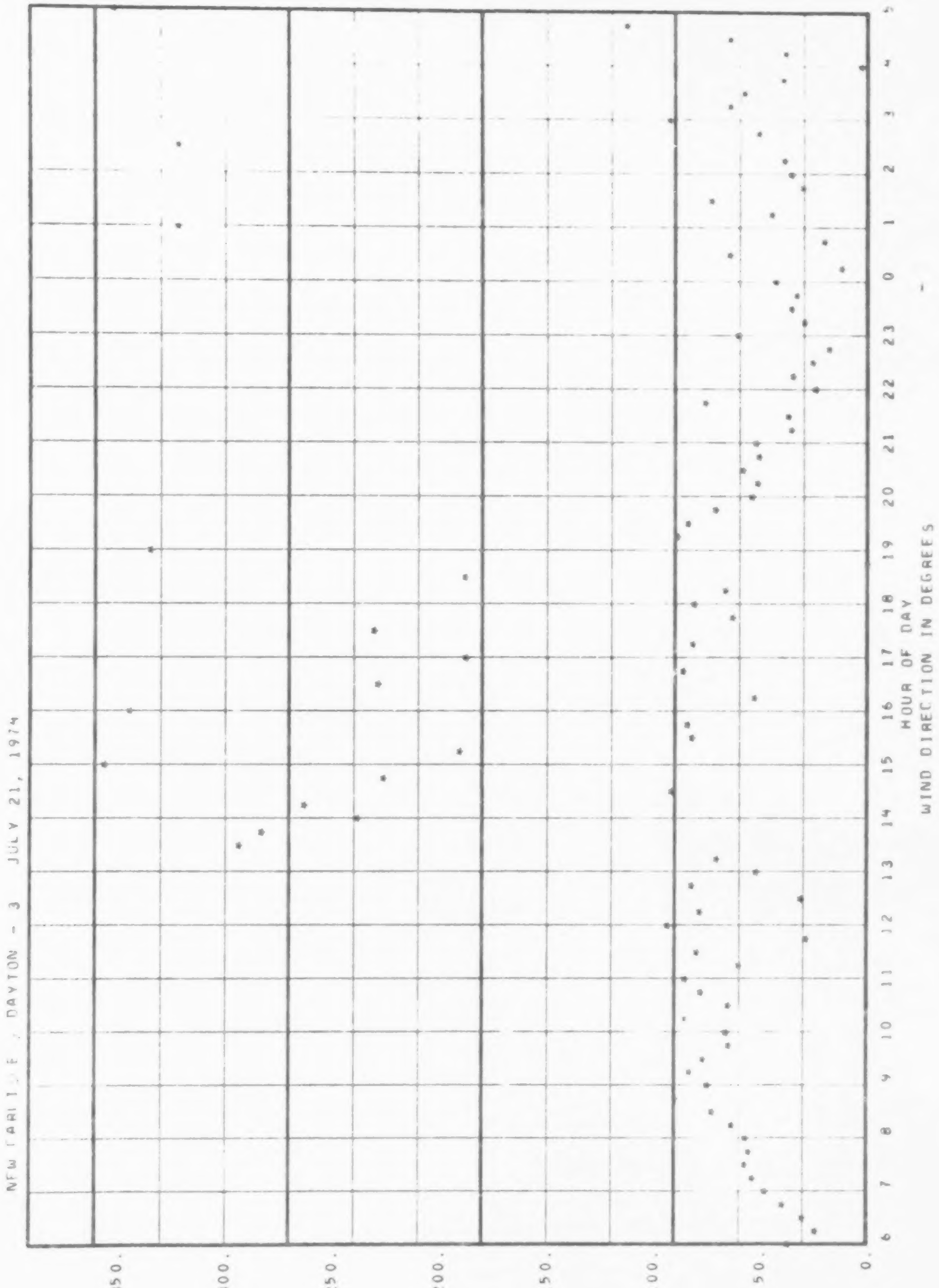

NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 2 FOR JULY 20, 1974
LEGEND
1--OZONE 0.100 PPM
2--NITRIC OXIDE 0.020 PPM
3--NITROGEN DIOXIDE 0.020 PPM
4--NITROGEN OXIDES 0.020 PPM

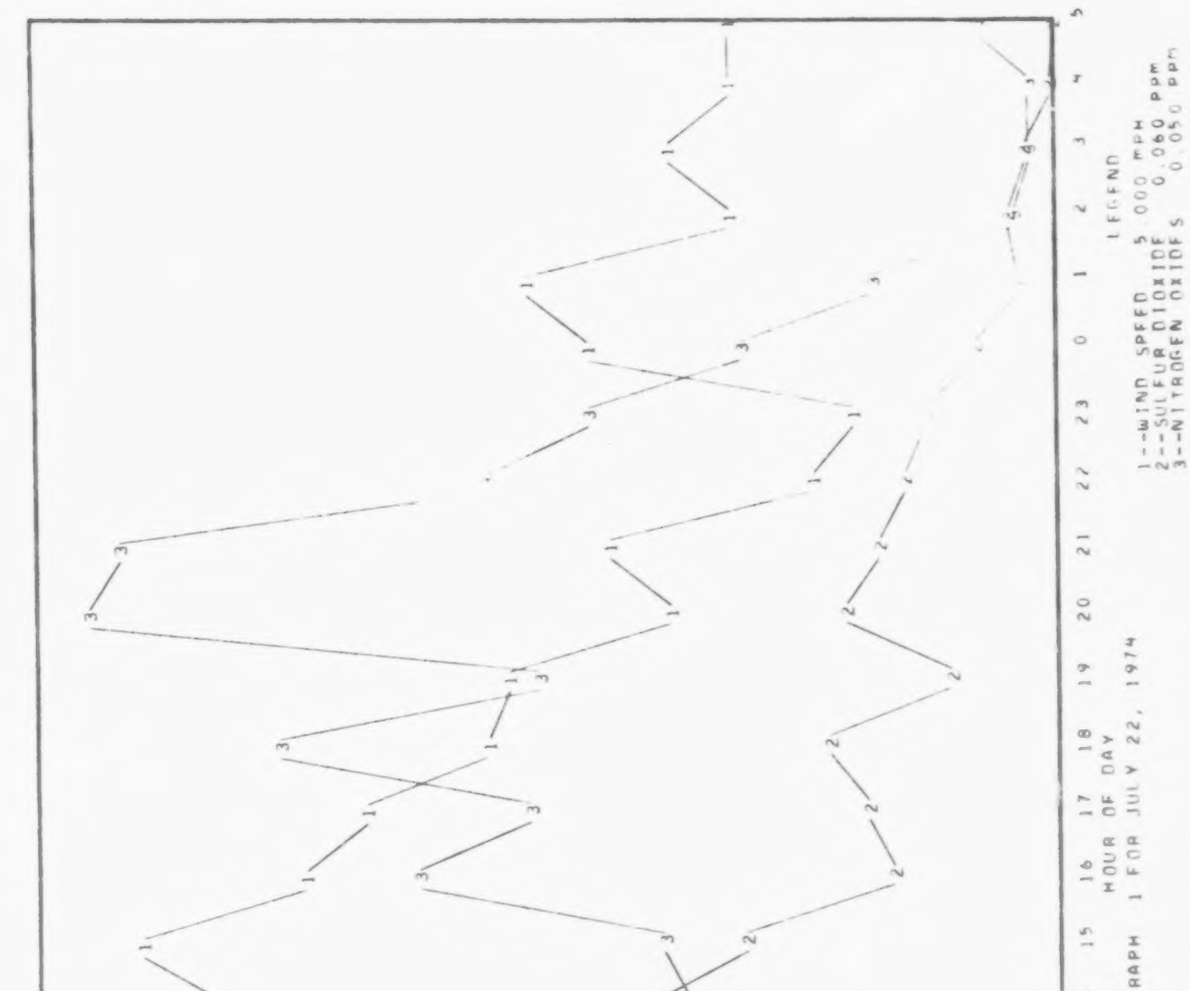

HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0



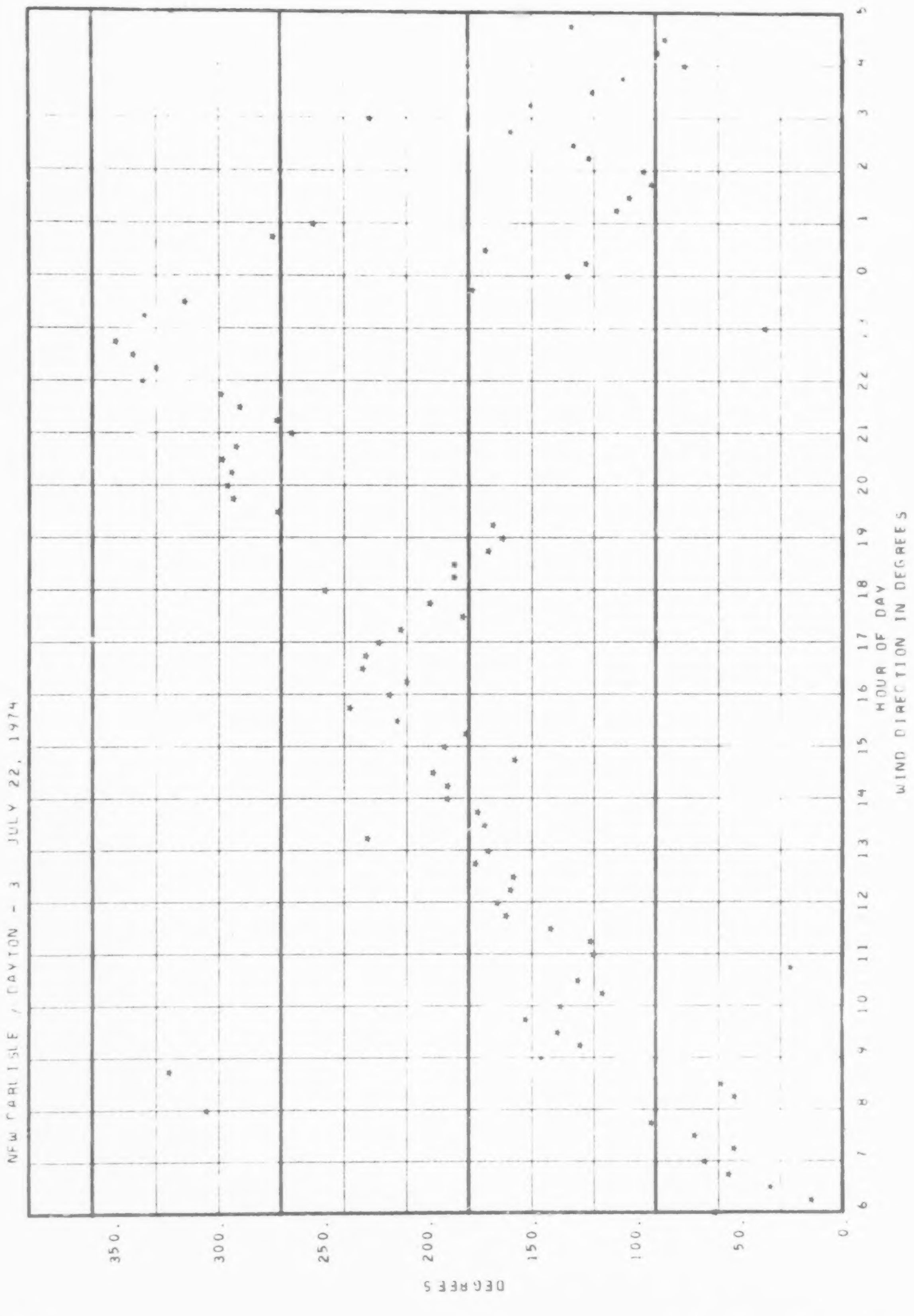
GRAPH 1 FOR JULY 21, 1974

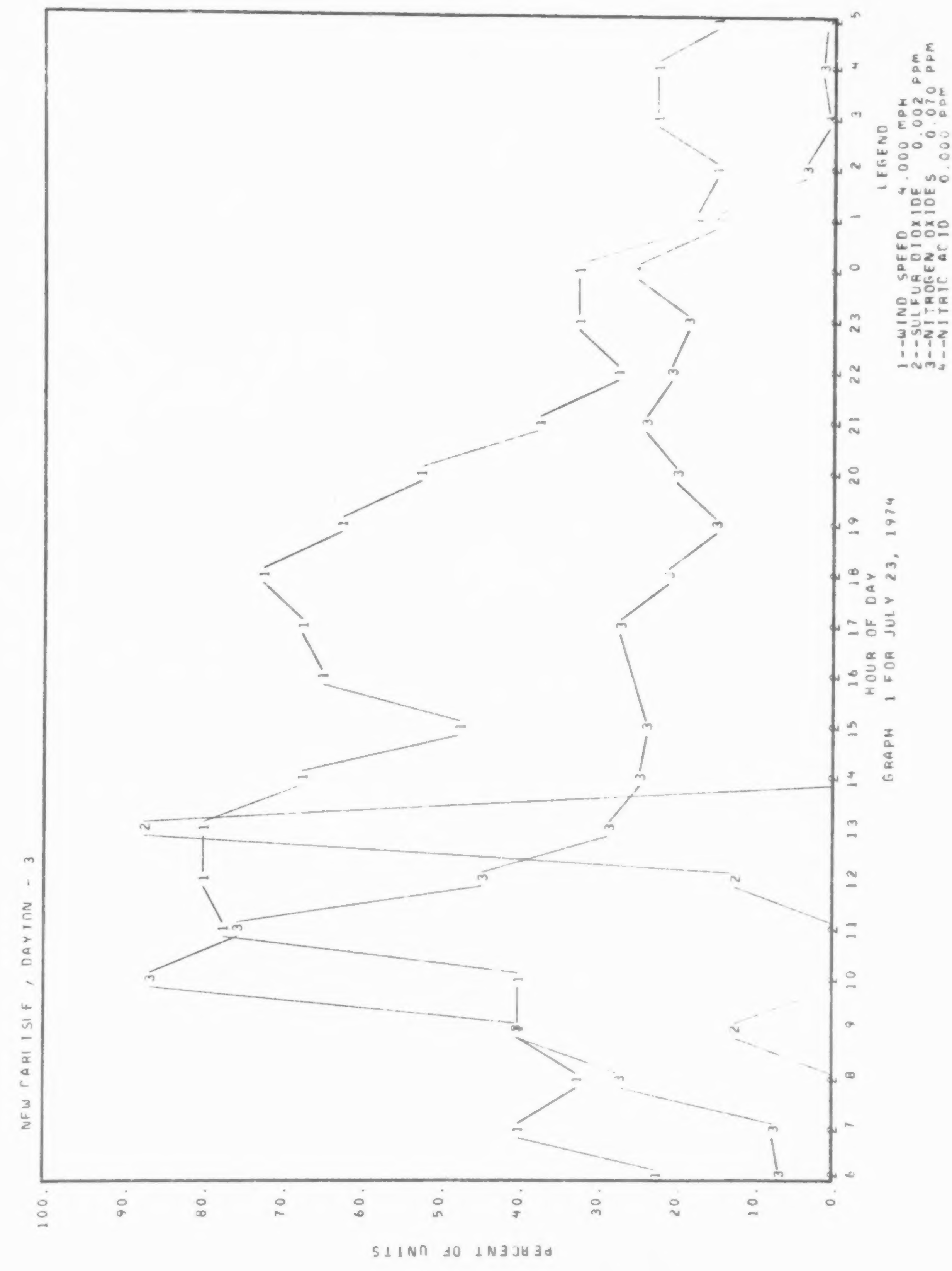

NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
100. 90. 80. 70. 60. 50. 40. 30. 20. 10. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR JULY 21, 1974
LEGEND
1--OZONE 0.100 PPM
2--NITRIC OXIDE 0.070 PPM
3--NITROGEN DIOXIDE 0.070 PPM
4--NITROGEN OXIDES 0.070 PPM


DAYTON - 3 JULY 21, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

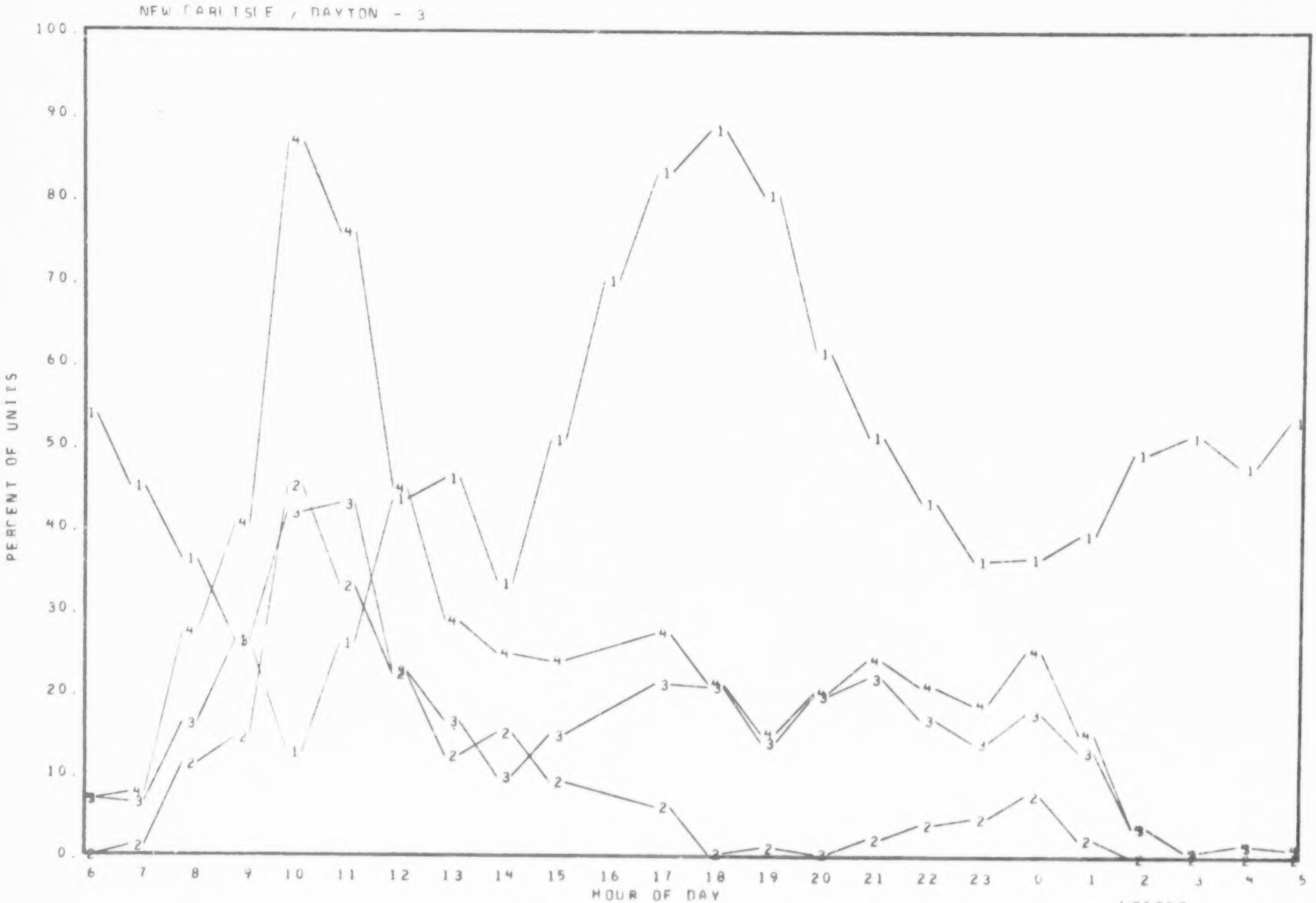

NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 1 FOR JULY 22, 1974
LEGEND
1--WIND SPEED 5.000 MPH
2--SULFUR DIOXIDE 0.060 PPM
3--NITROGEN OXIDES 0.050 PPM

GRAPH 2 FOR JULY 22, 1974


NEW CARLISLE / DAYTON - 3 JULY 22, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
0. 50. 100. 150. 200. 250. 300. 350.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

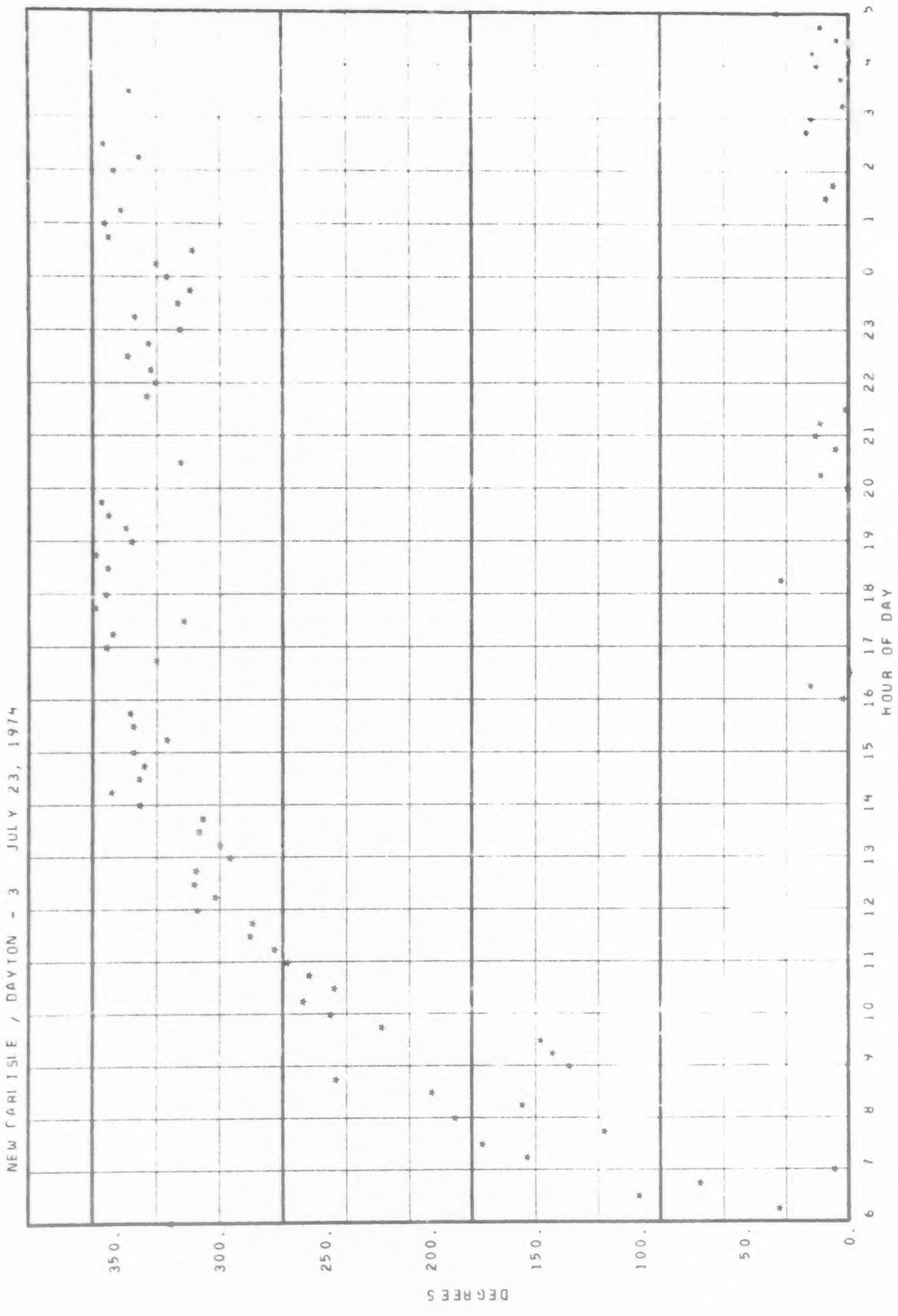


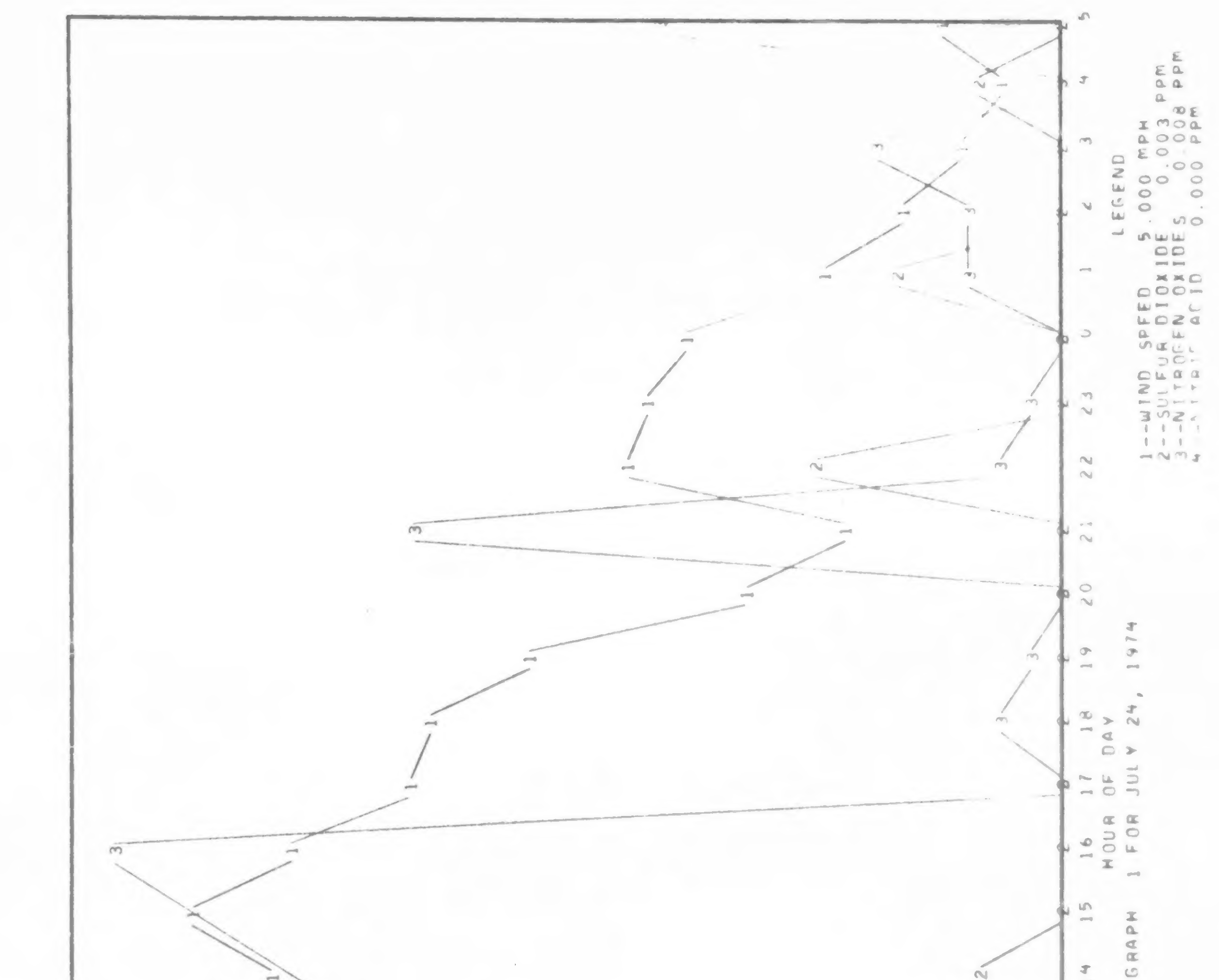
GRAPH 1 FOR JULY 23, 1974

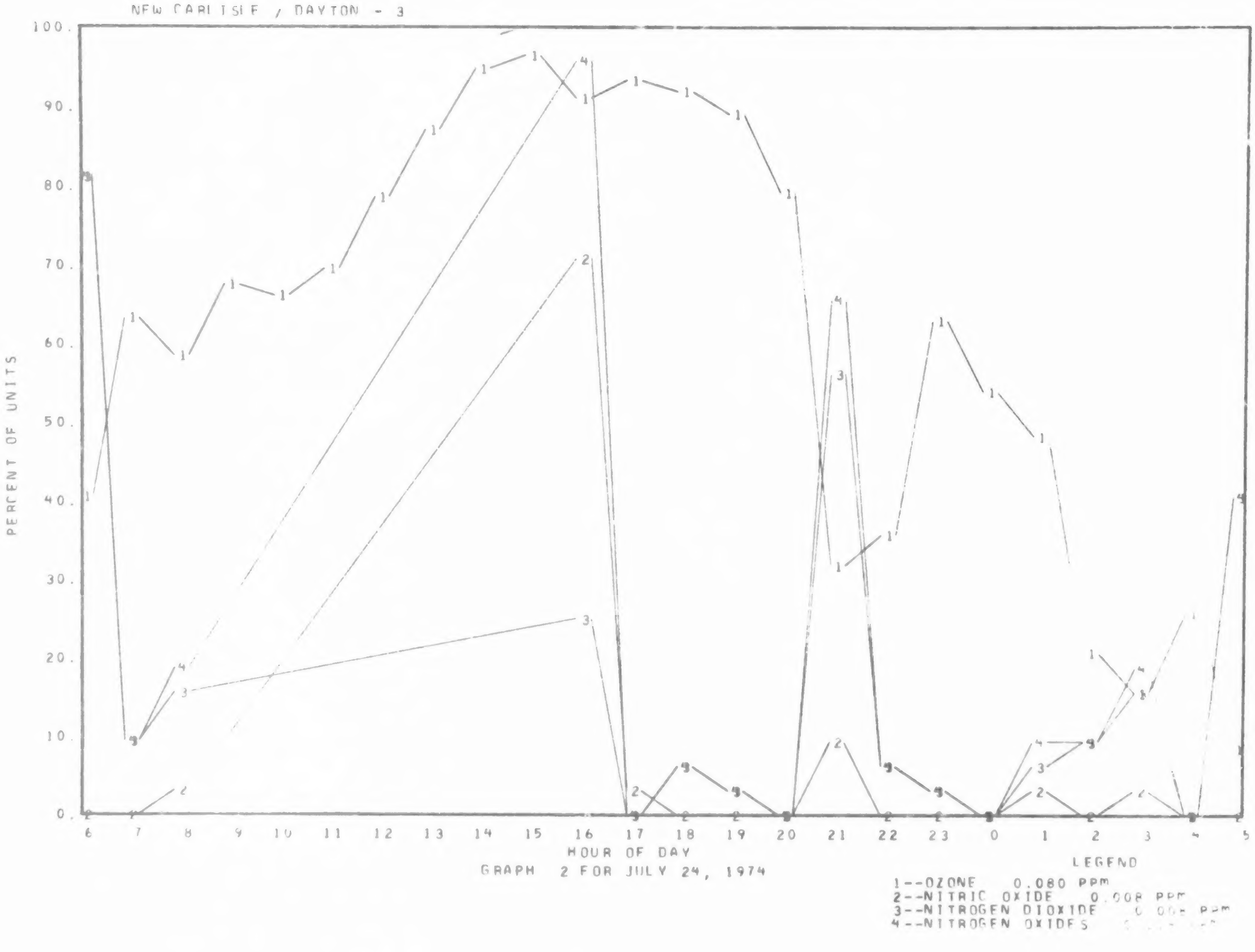


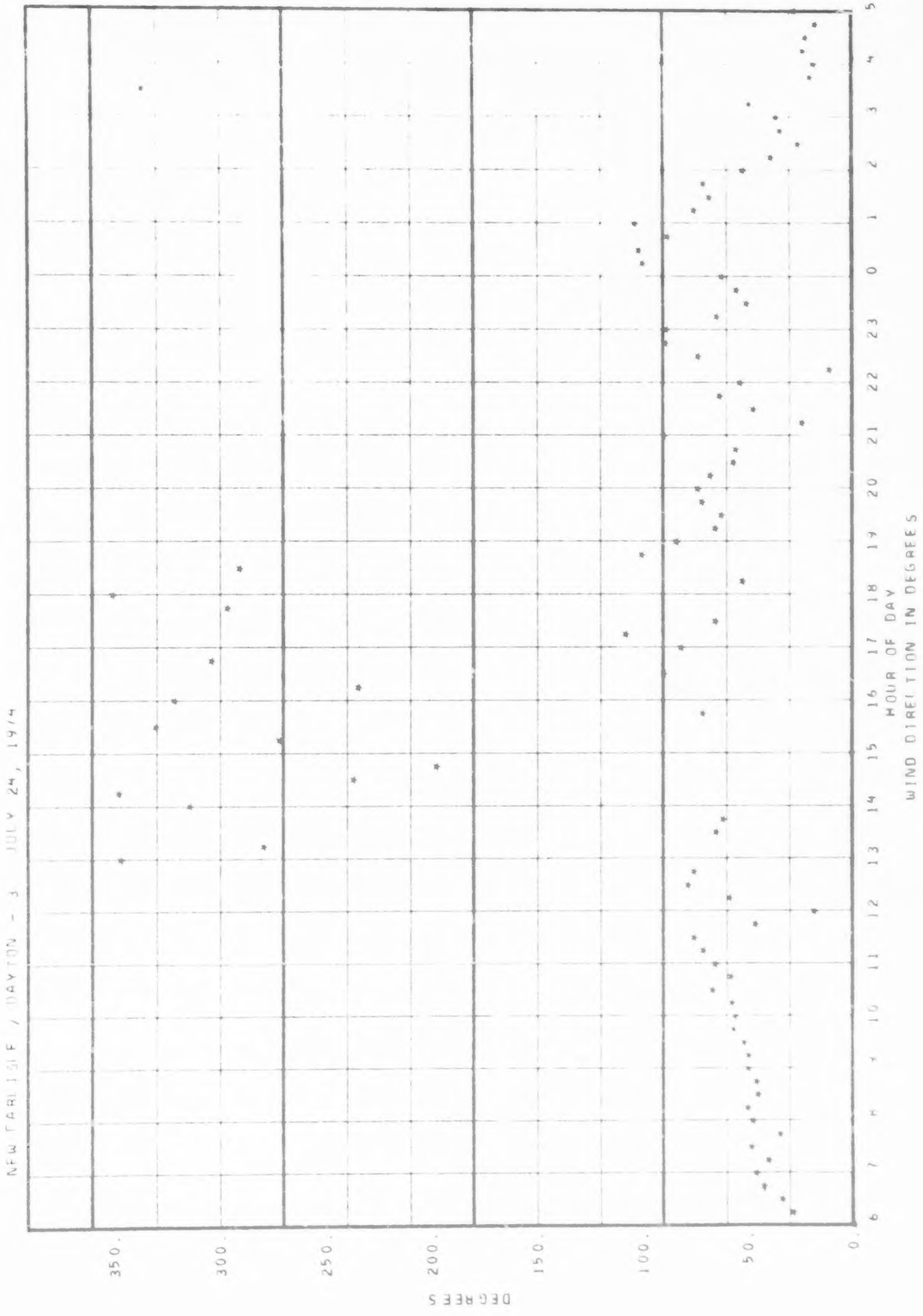
GRAPH 2 FOR JULY 23, 1974

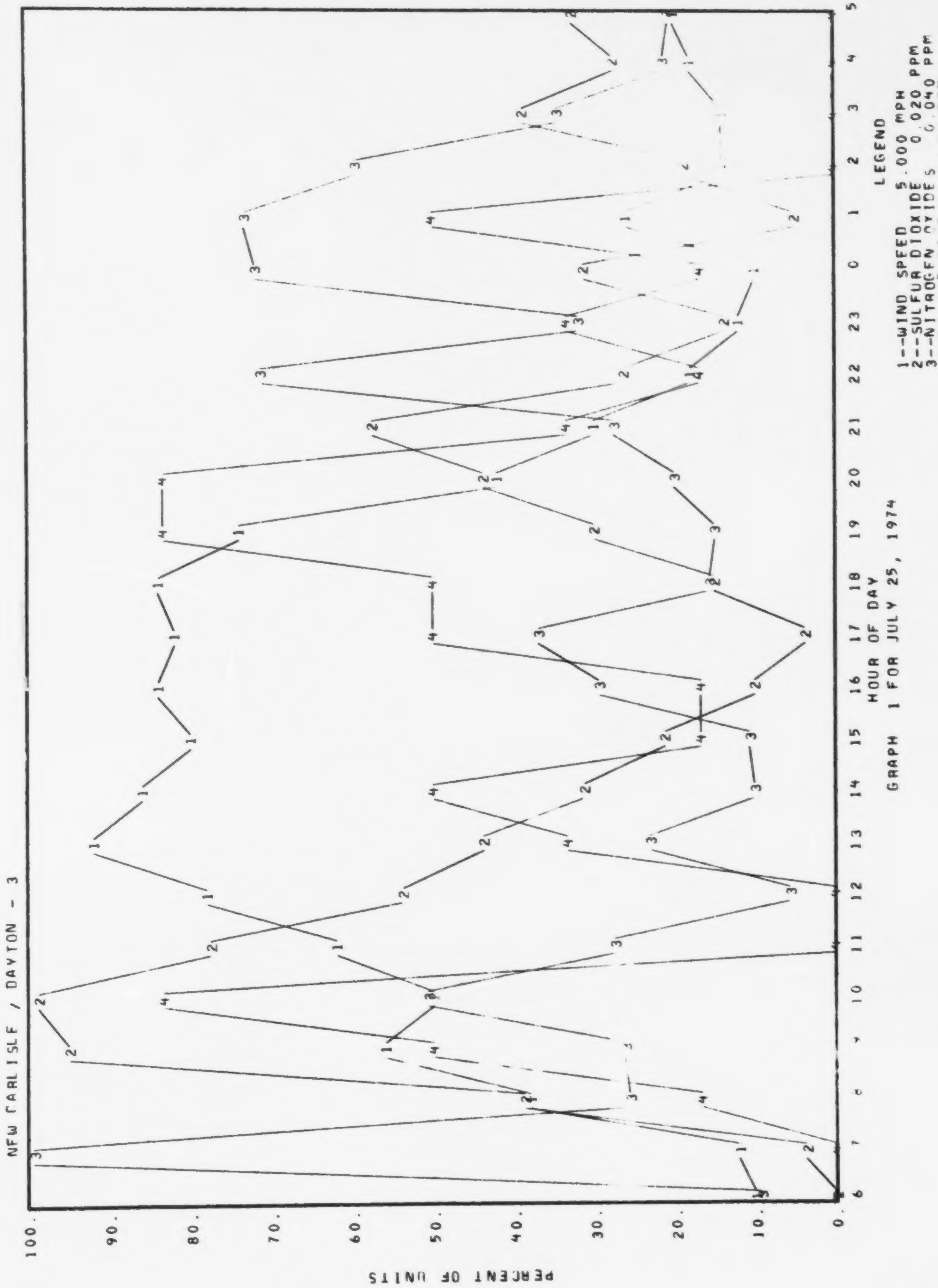
LEGEND
1--OZONE 0.080 PPM
2--NITRIC OXIDE 0.070 PPM
3--NITROGEN DIOXIDE 0.070 PPM
4--NITROGEN OXIDES 0.070 PPM

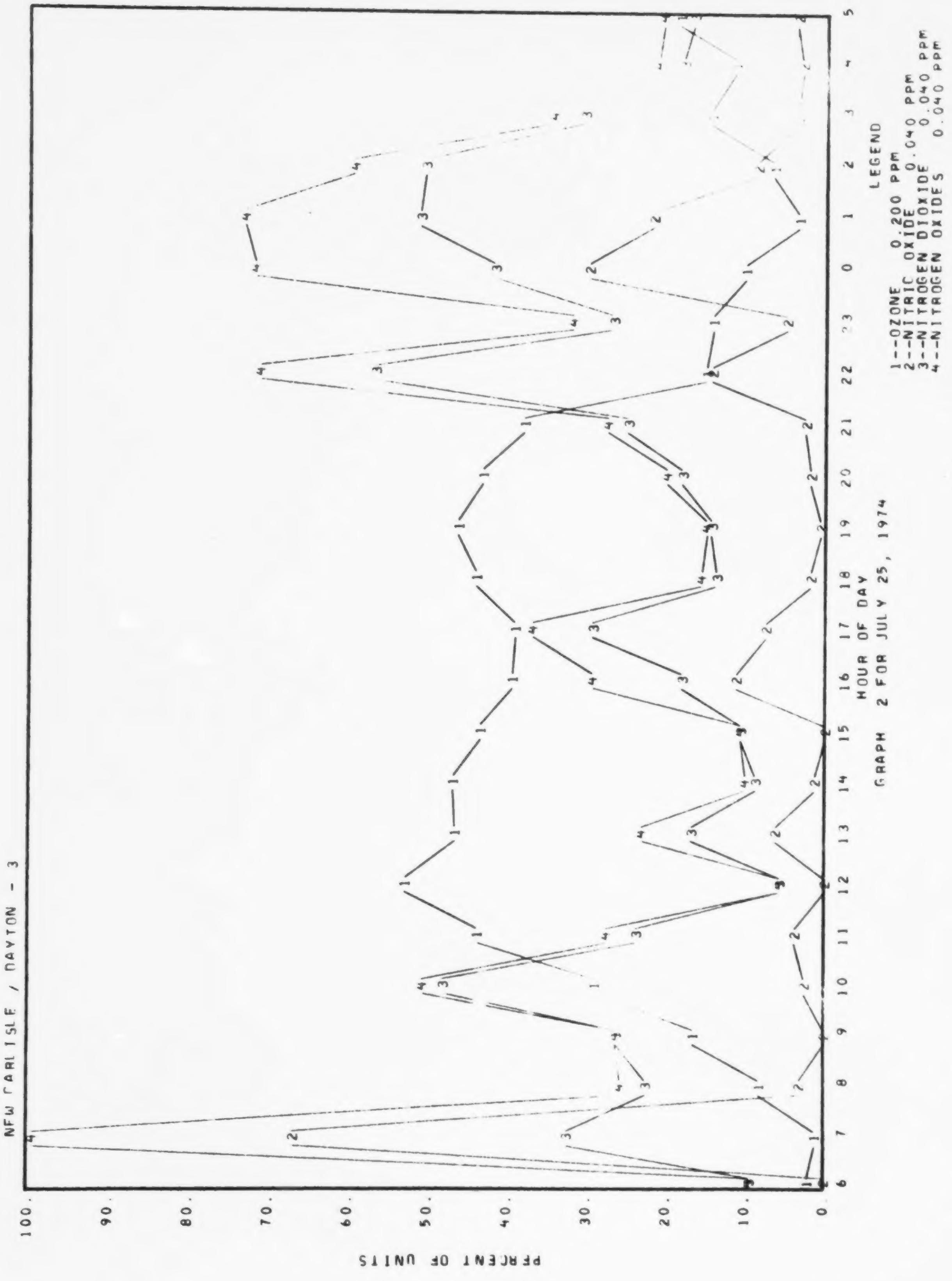

NEW CARLISLE / DAYTON - 3 JULY 23, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5


NEW CARLISLE , DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 1 FOR JULY 24, 1974
LEGEND
1--WIND SPEED 5.000 MPH
2--SULFUR DIOXIDE 0.003 PPM
3--NITROGEN OXIDES 0.008 PPM
4--NITRIC ACID 0.000 PPM

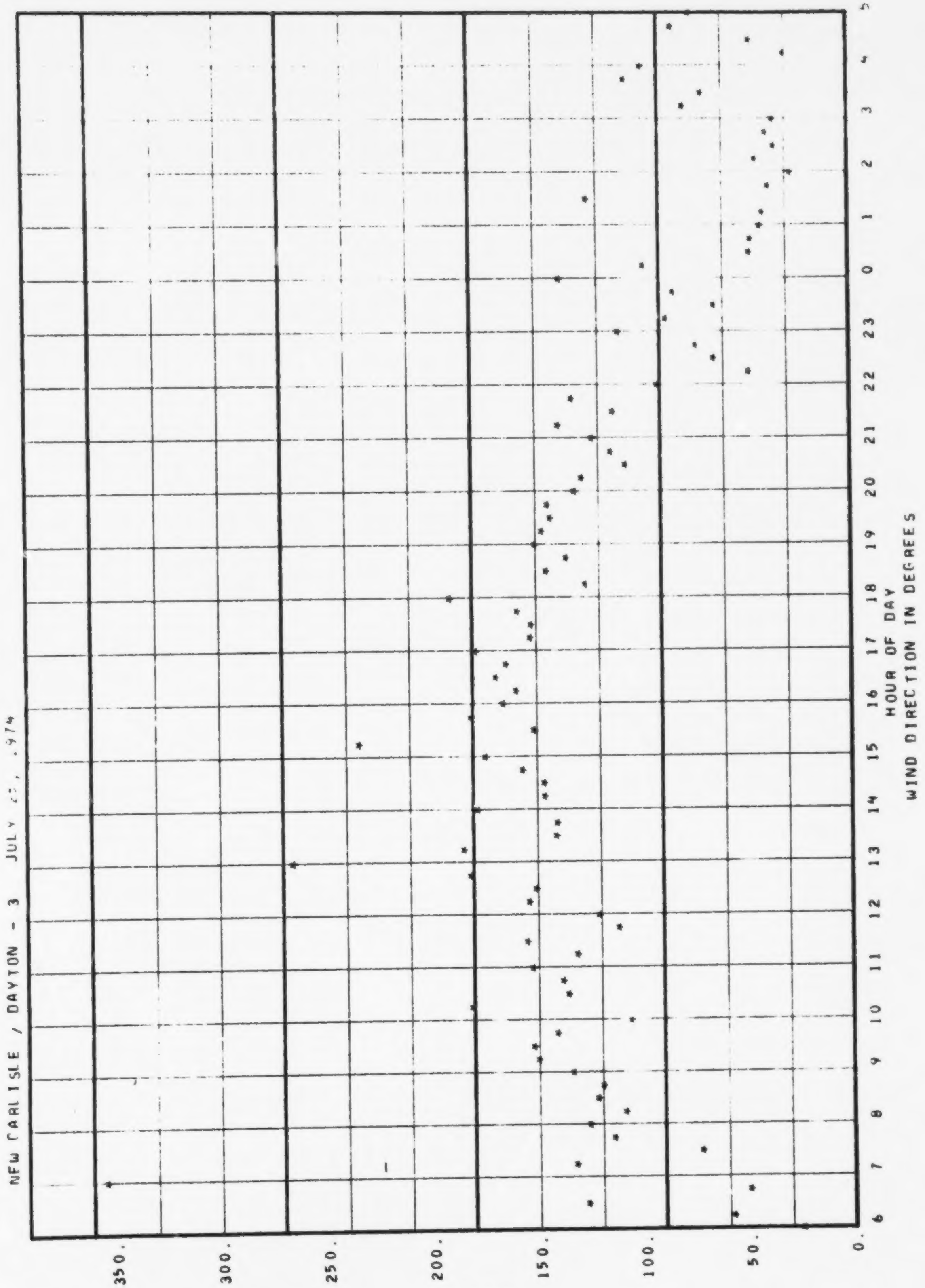

NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
0. 10. 20. 30. 40. 50. 60. 70. 80. 90. 100.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR JULY 24, 1974
LEGEND
1--OZONE 0.080 PPM
2--NITRIC OXIDE 0.008 PPM
3--NITROGEN DIOXIDE
4--NITROGEN OXIDES

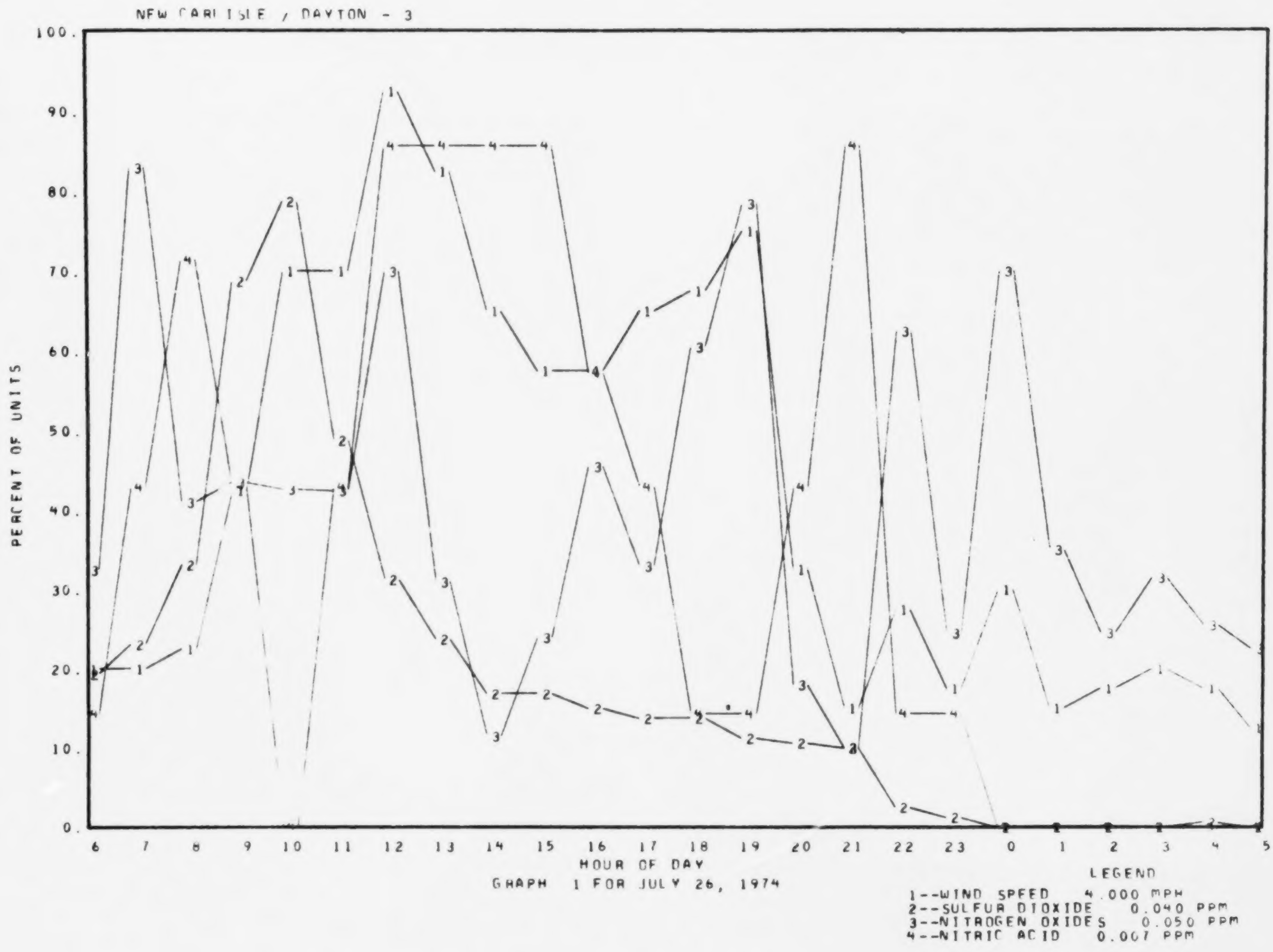

NEW CARLISLE / DAYTON - 3 JULY 24, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5


NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 1 FOR JULY 25, 1974
LEGEND
1--WIND SPEED 5.000 MPH
2--SULFUR DIOXIDE 0.020 PPM
3--NITROGEN OXIDES 0.040 PPM

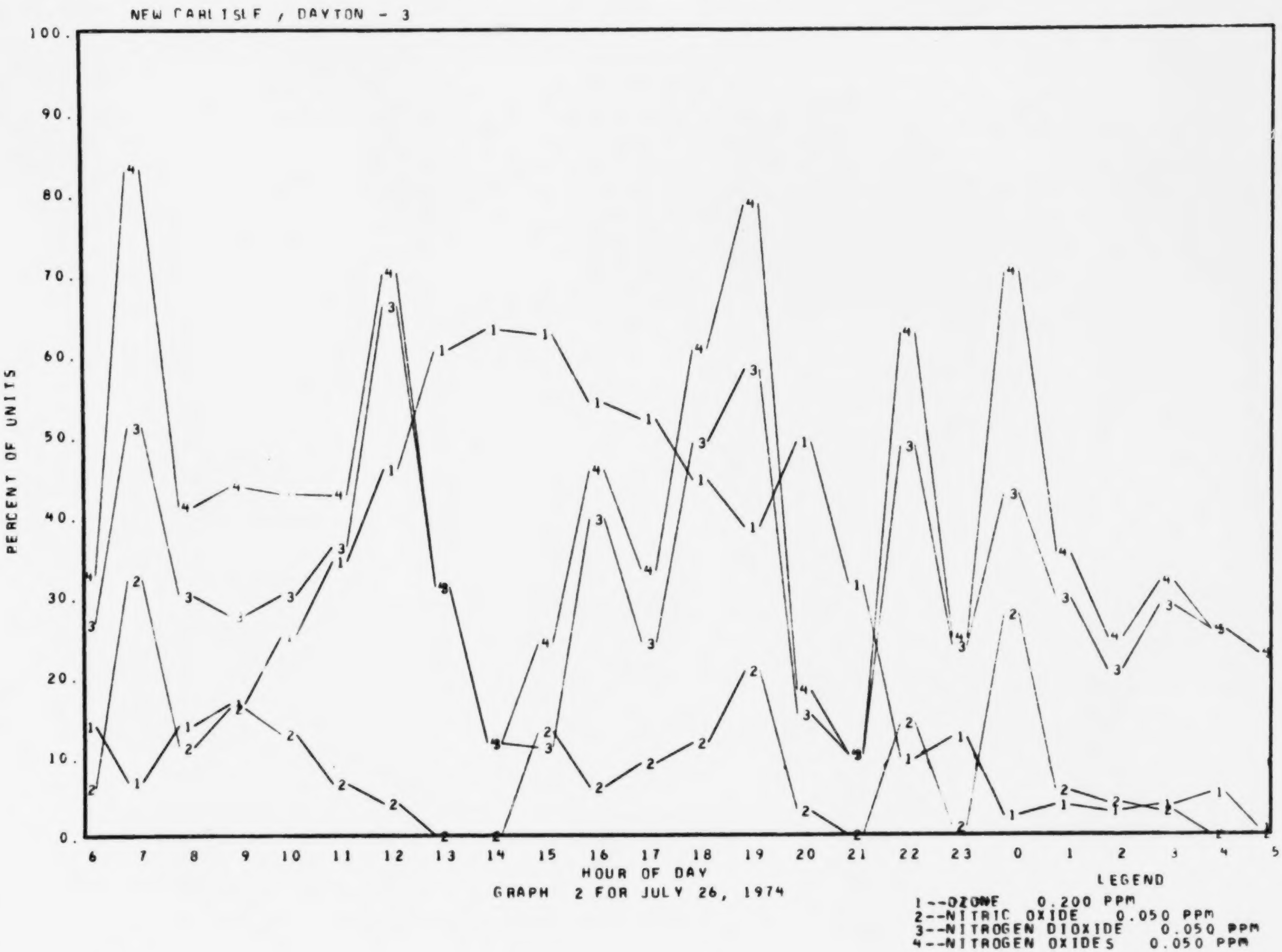


GRAPH 2 FOR JULY 25, 1974

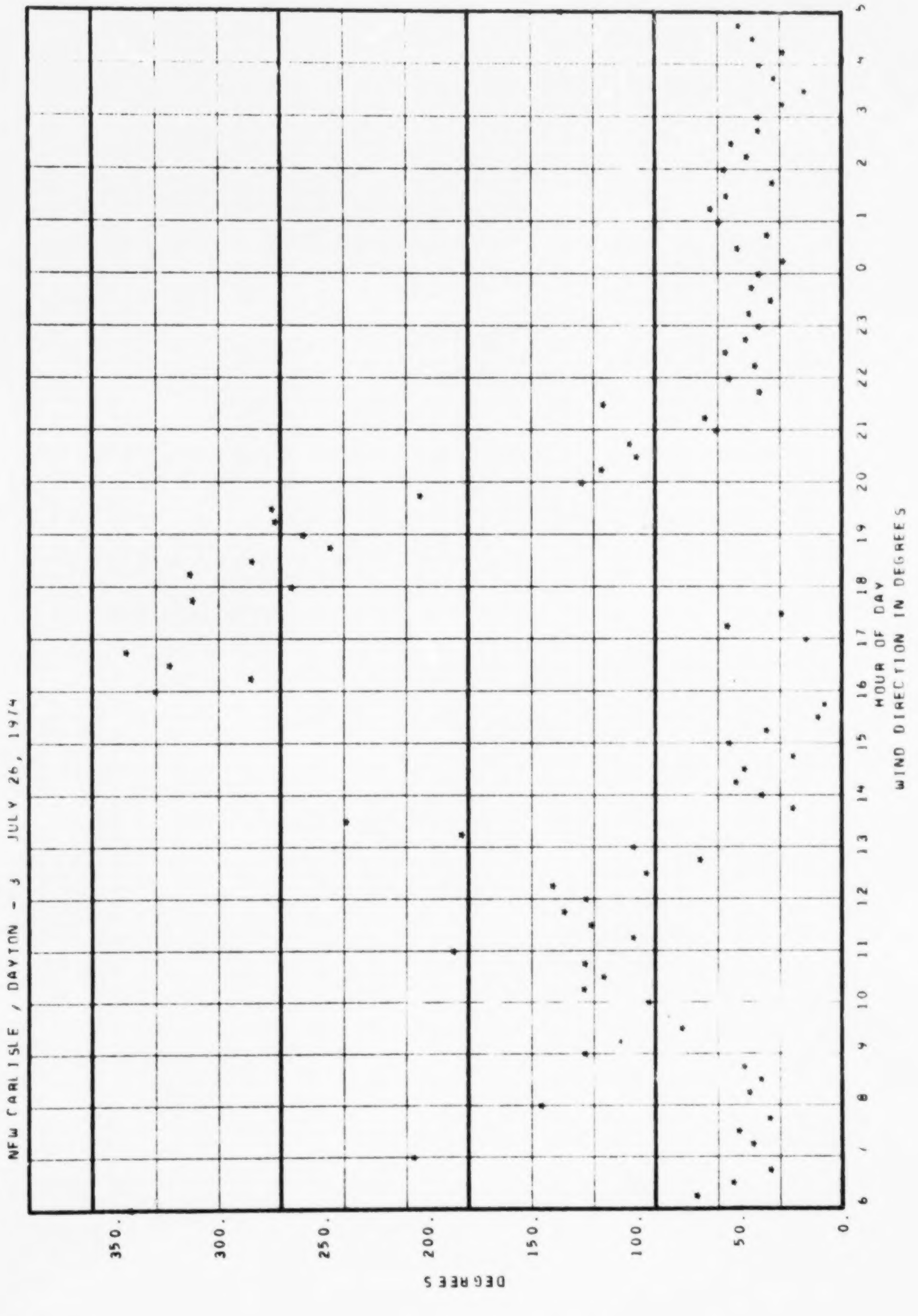

NEW CARLISLE / DAYTON - 3 JULY 2?, 1974
DEGREES
0. 50. 100. 150. 200. 250. 300. 350.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
WIND DIRECTION IN DEGREES

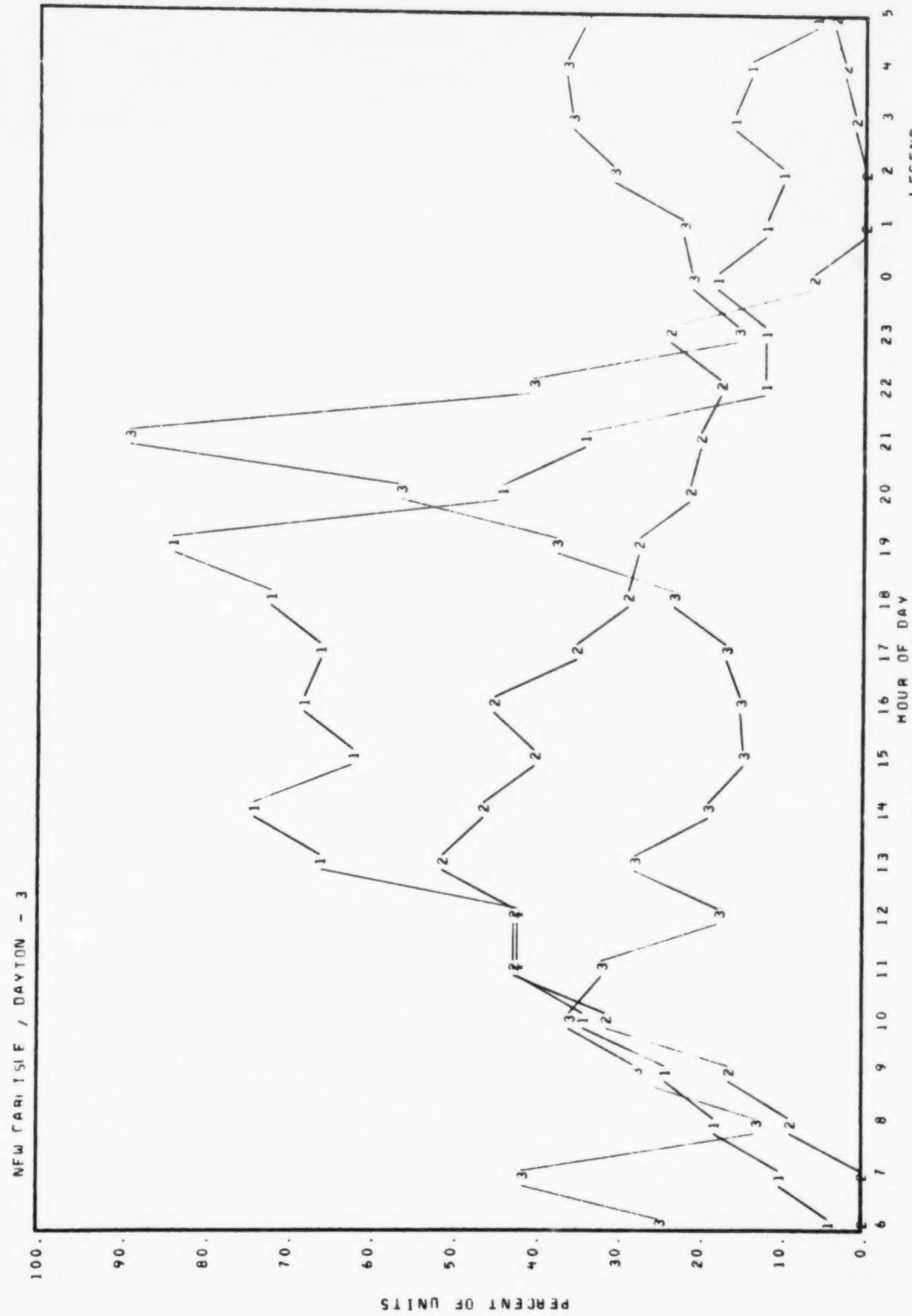


GRAPH 1 FOR JULY 26, 1974



GRAPH 2 FOR JULY 26, 1974

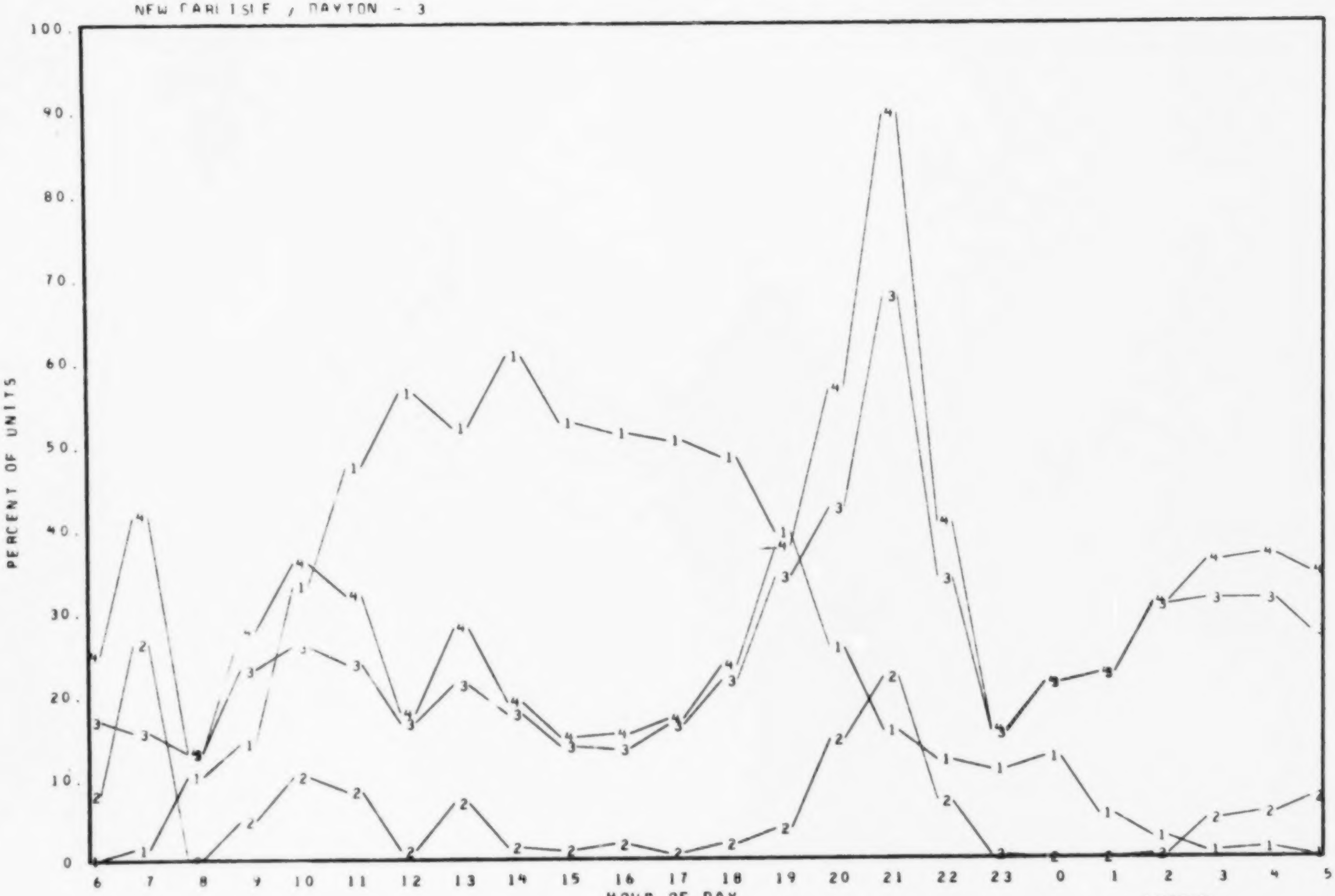

NEW CARLISLE / DAYTON - 3 JULY 26, 1974
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
WIND DIRECTION IN DEGREES



GRAPH 1 FOR JULY 27, 1974

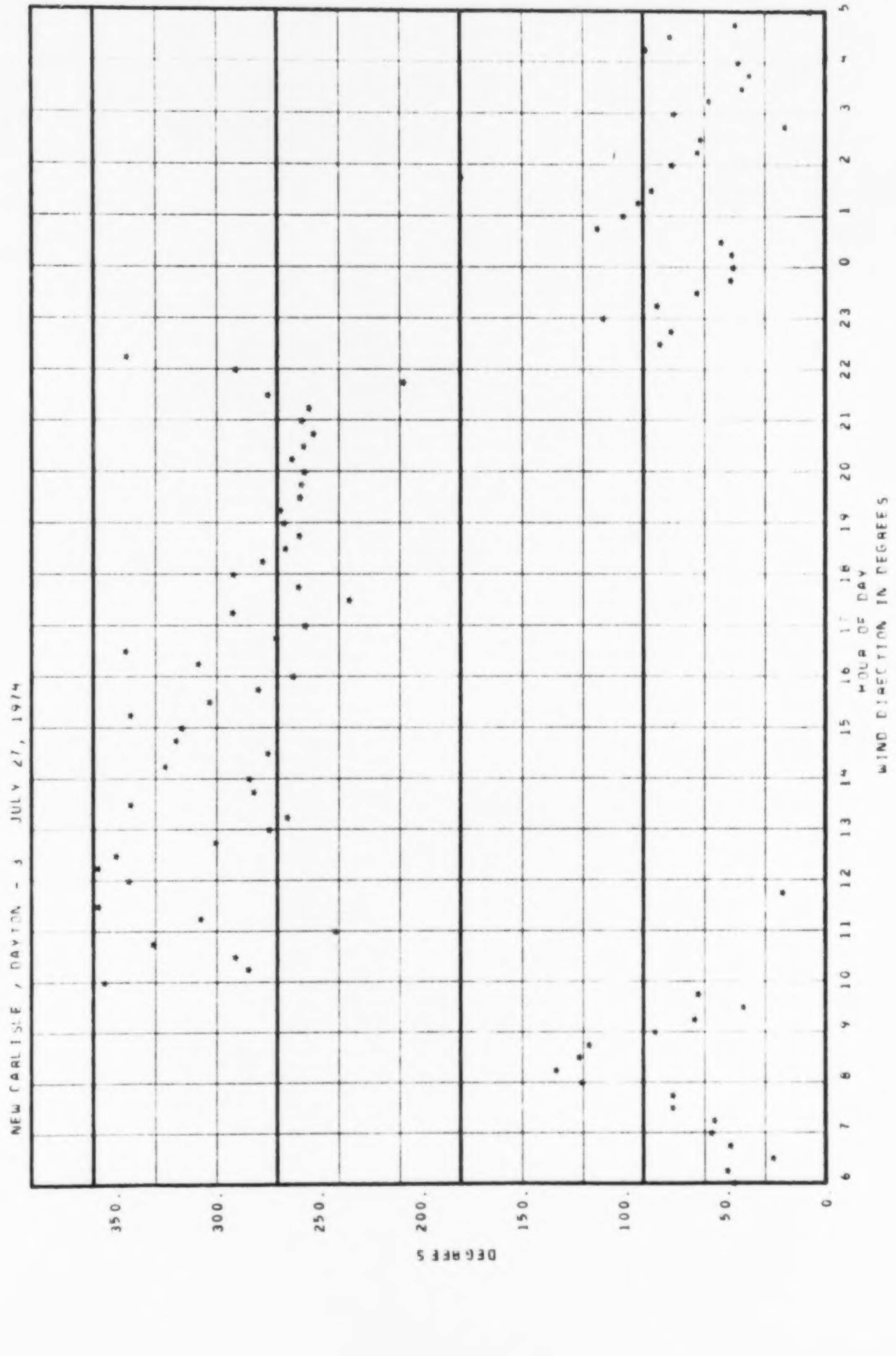
LEGEND
1--WIND SPEED 5.000 MPH
2--SULFUR DIOXIDE 0.020 PPM
3--NITROGEN OXIDES 0.070 PPM

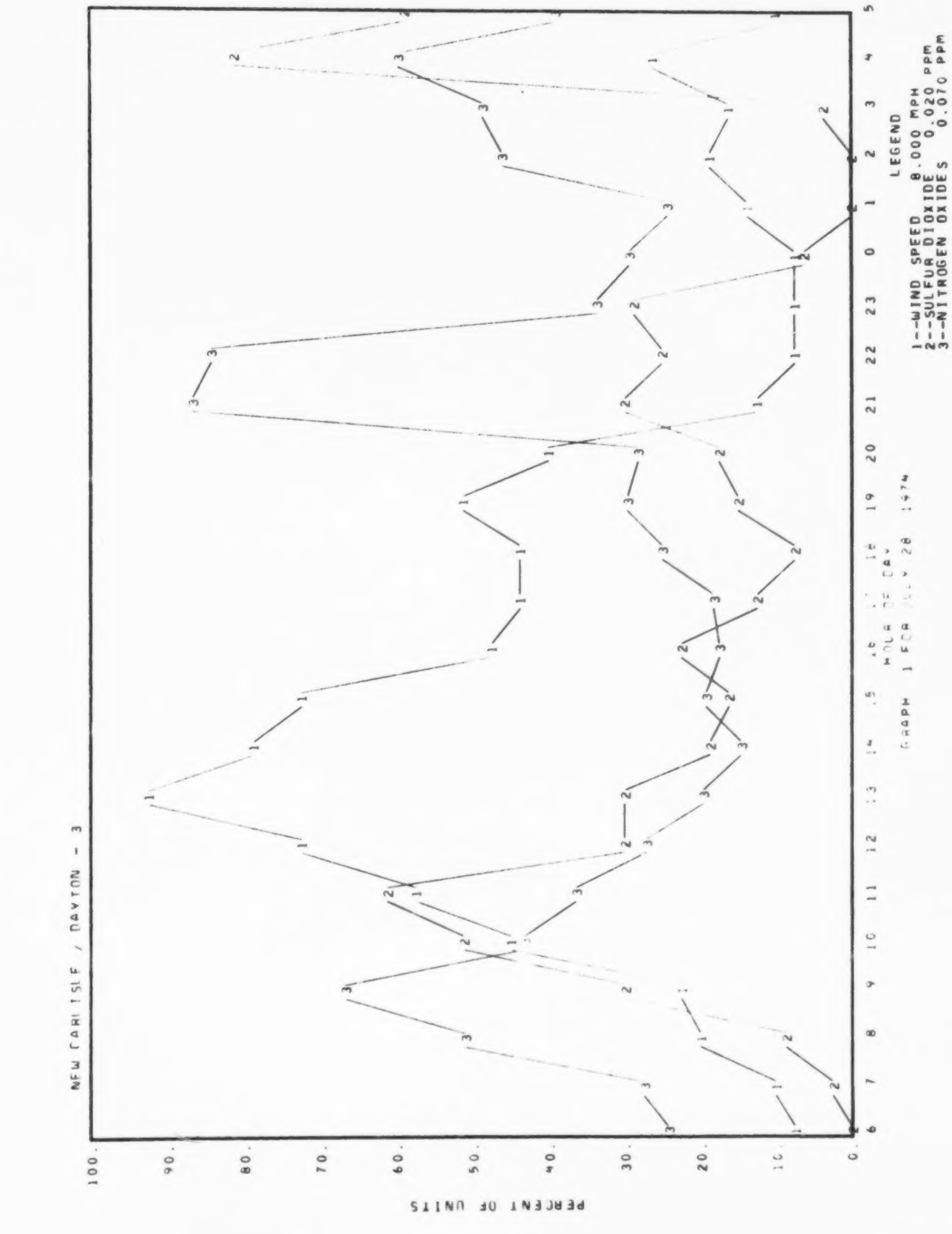
NEW CARLISLE / DAYTON - 3



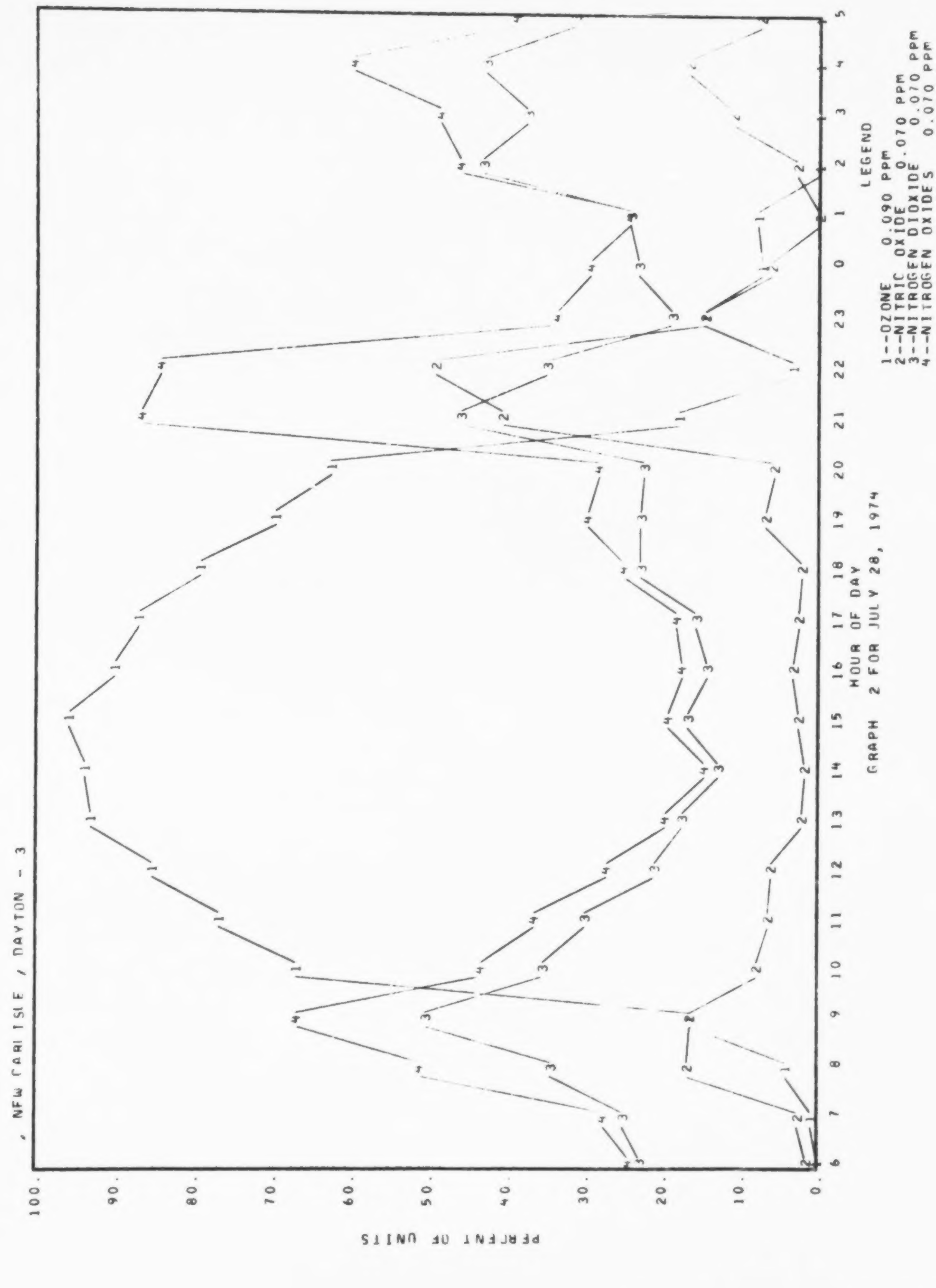
GRAPH 2 FOR JULY 27, 1974

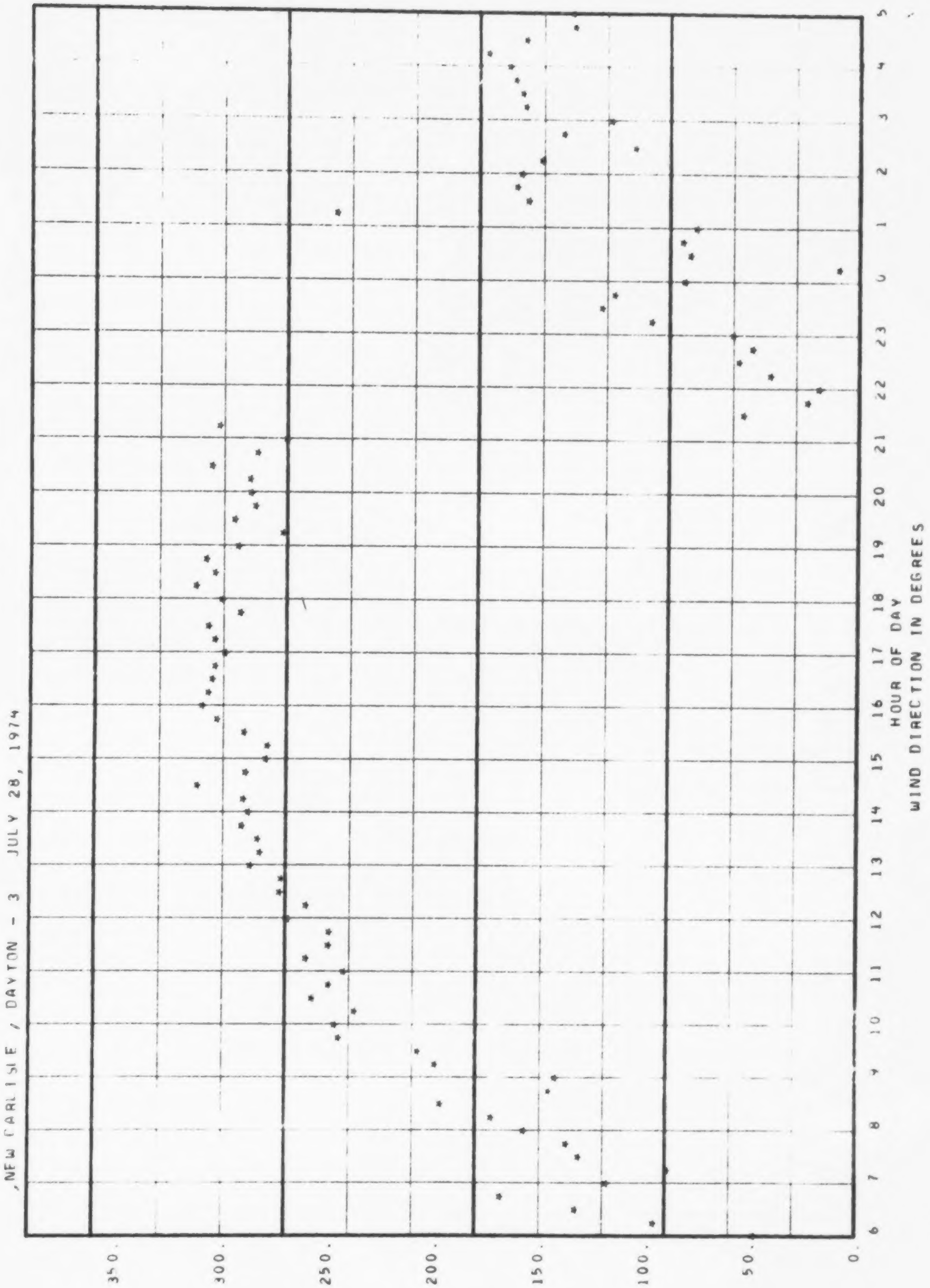
LEGEND
1--OZONE 0.200 PPM
2--NITRIC OXIDE 0.070 PPM
3--NITROGEN DIOXIDE 0.070 PPM
4--NITROGEN OXIDES 0.070 PPM


NEW CARLISLE , DAYTON - 3   JULY 27, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350. 300. 250. 200. 150. 100. 50. 0



GRAPH 1 FOR JULY 28 1974

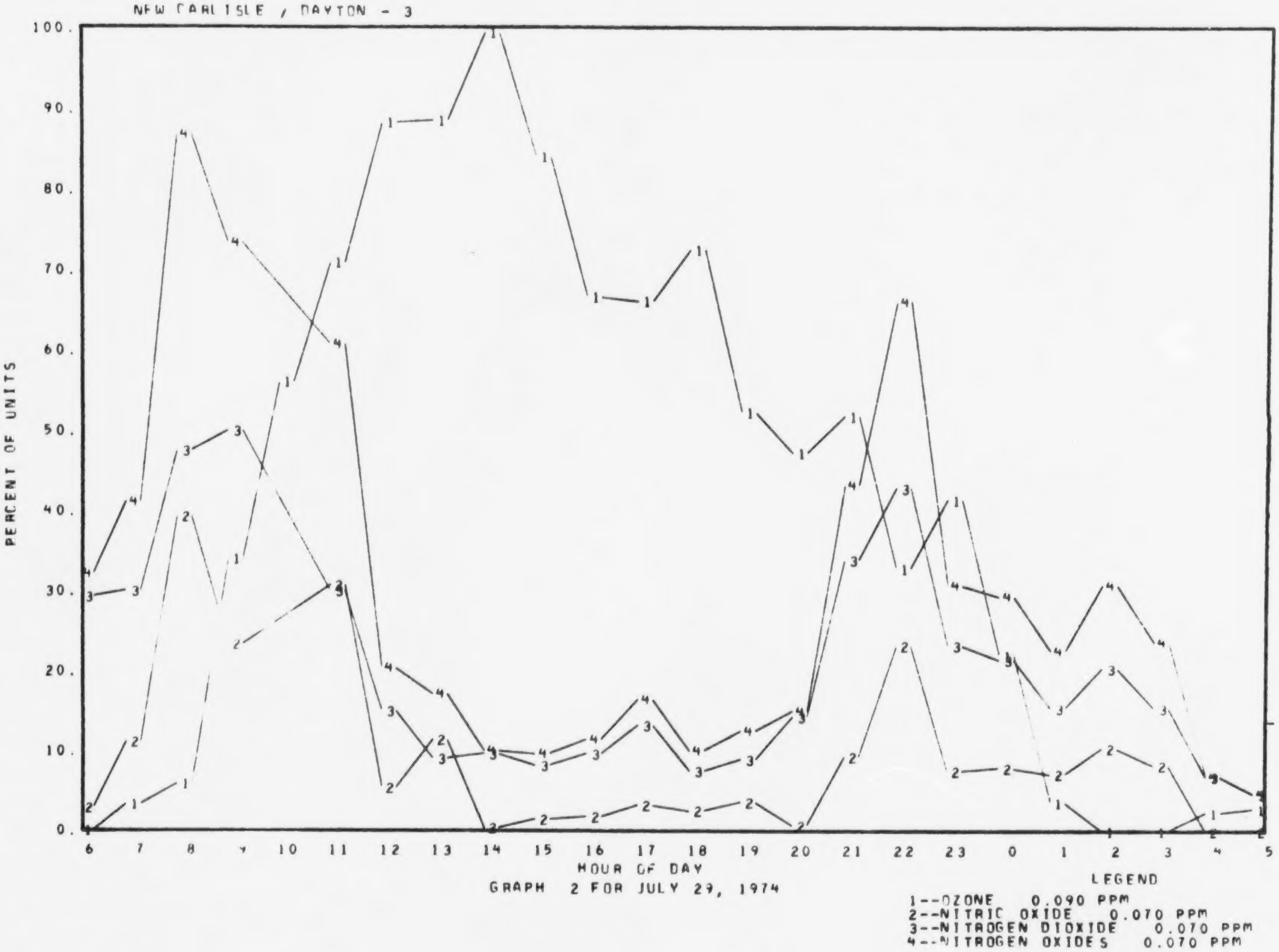

, NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR JULY 28, 1974
LEGEND
1--OZONE 0.090 PPM
2--NITRIC OXIDE 0.070 PPM
3--NITROGEN DIOXIDE 0.070 PPM
4--NITROGEN OXIDES 0.070 PPM


NEW CARLISLE / DAYTON - 3 JULY 28, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
350. 300. 250. 200. 150. 100. 50. 0.

GRAPH 1 FOR JULY 29, 1974

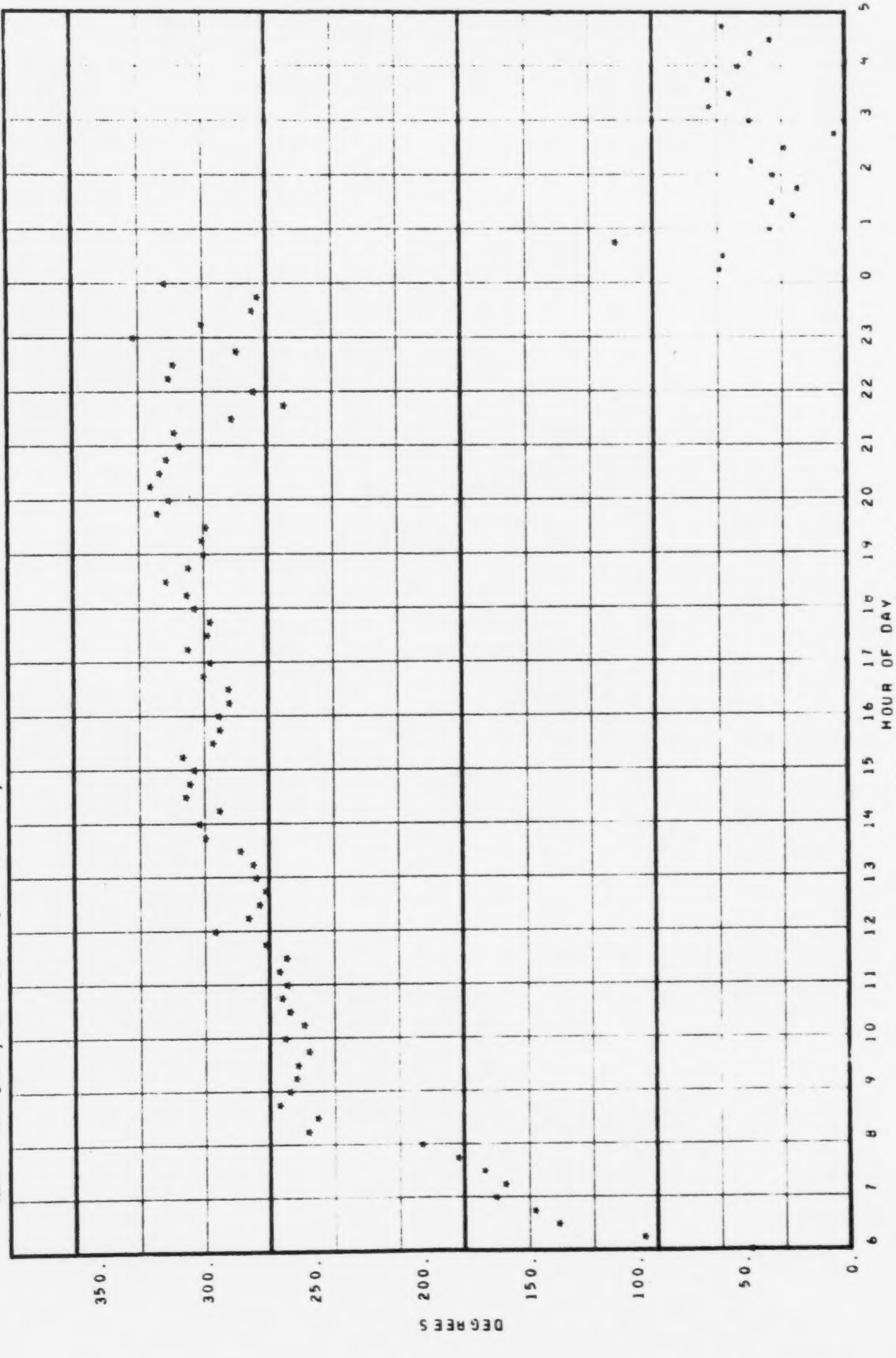
LEGEND

1--WIND SPEED 10.000 MPH
2--SULFUR DIOXIDE 0.030 PPM
3--NITROGEN OXIDES 0.070 PPM
4--NITRIC ACID 0.000 PPM

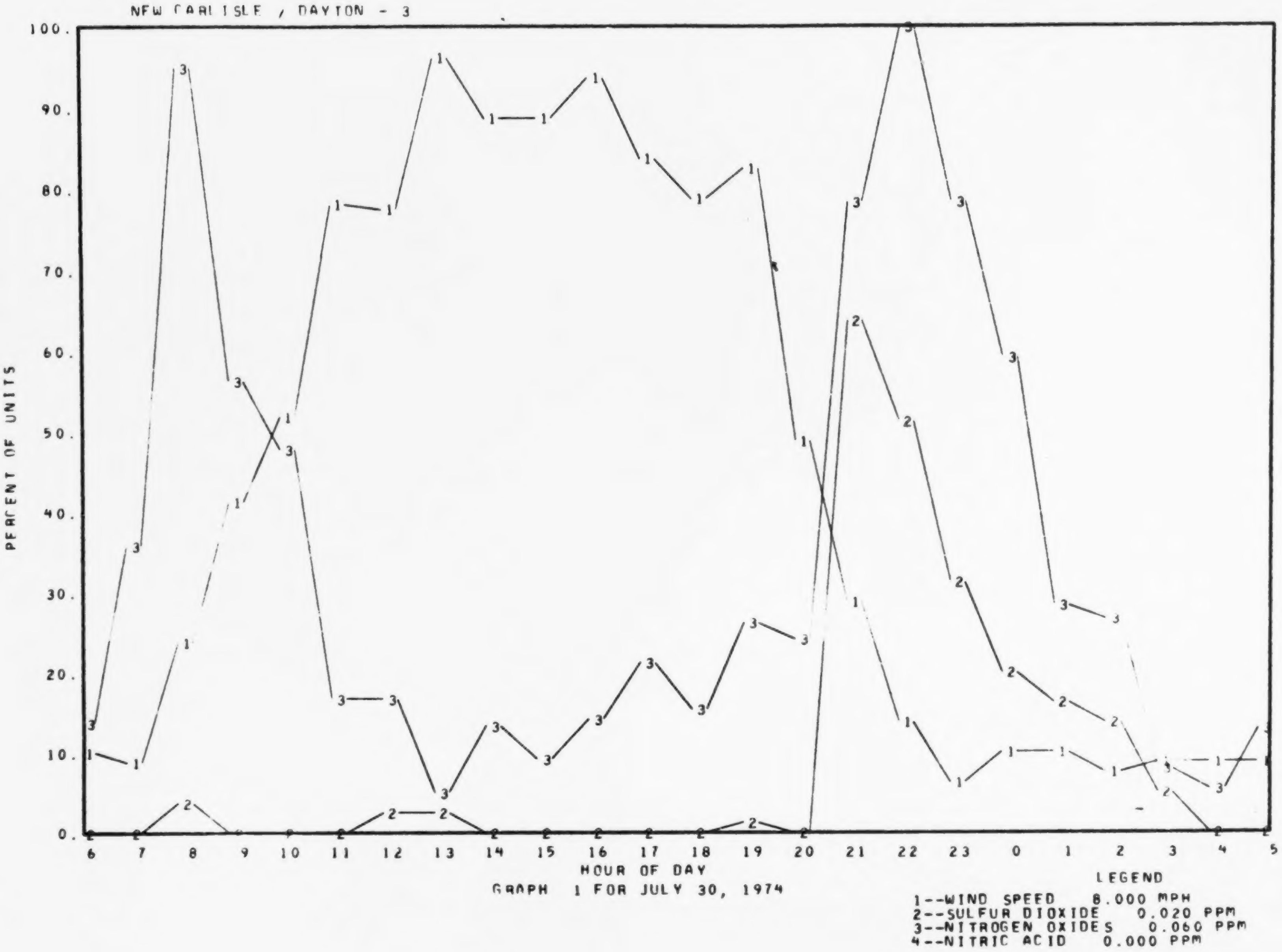


GRAPH 2 FOR JULY 29, 1974

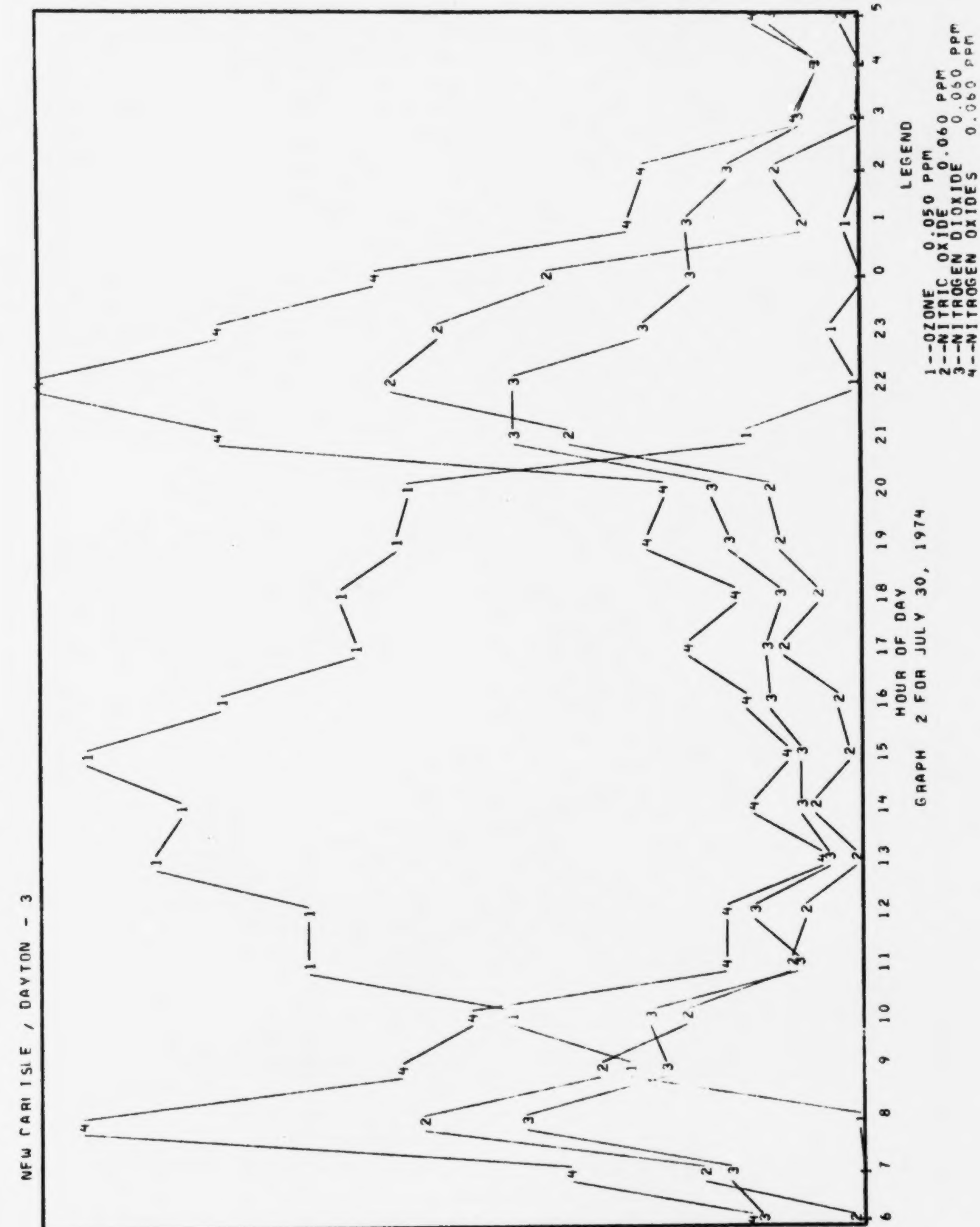
NEW CARLISLE / DAYTON - 3   JULY 29, 1974



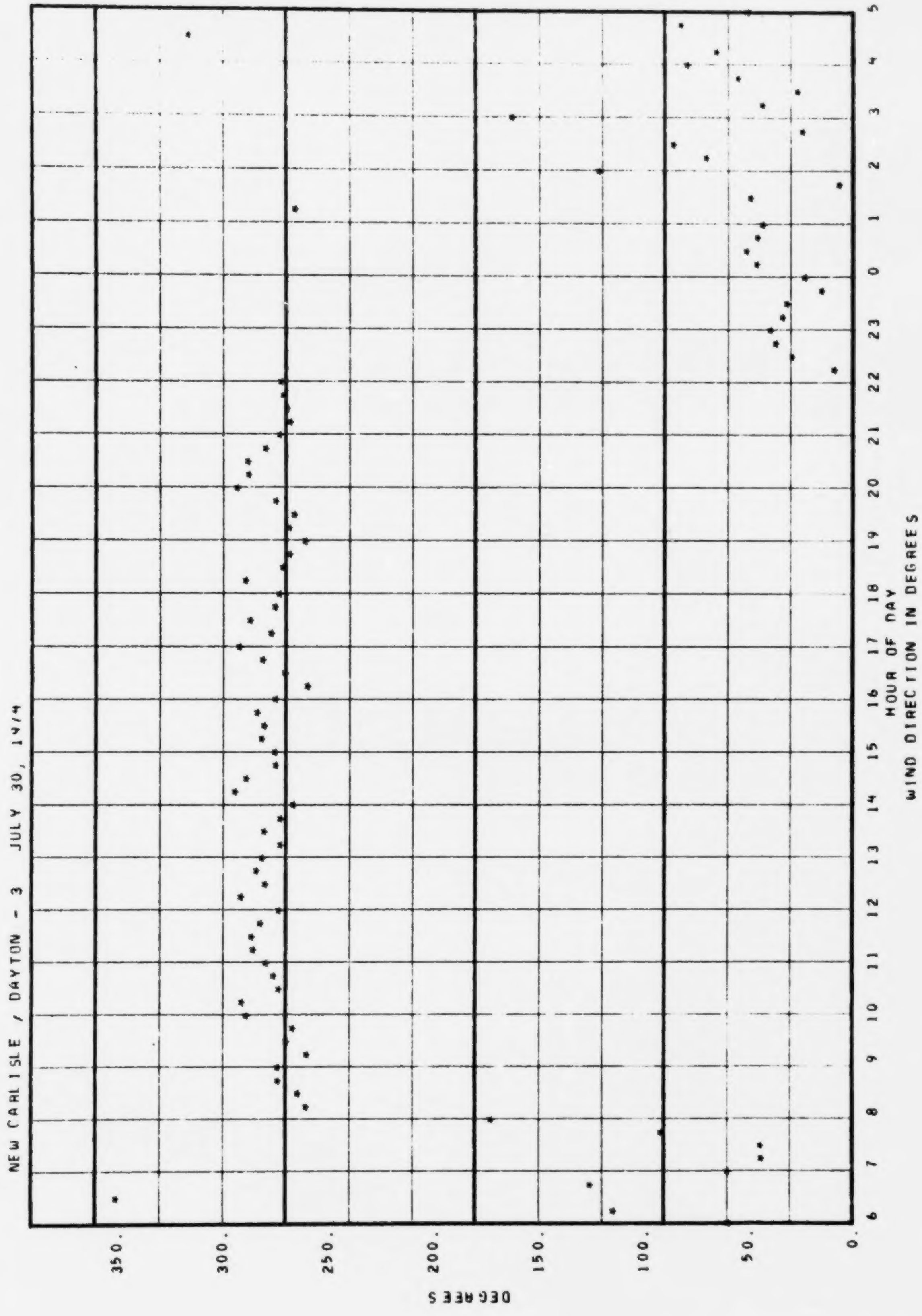
WIND DIRECTION IN DEGREES

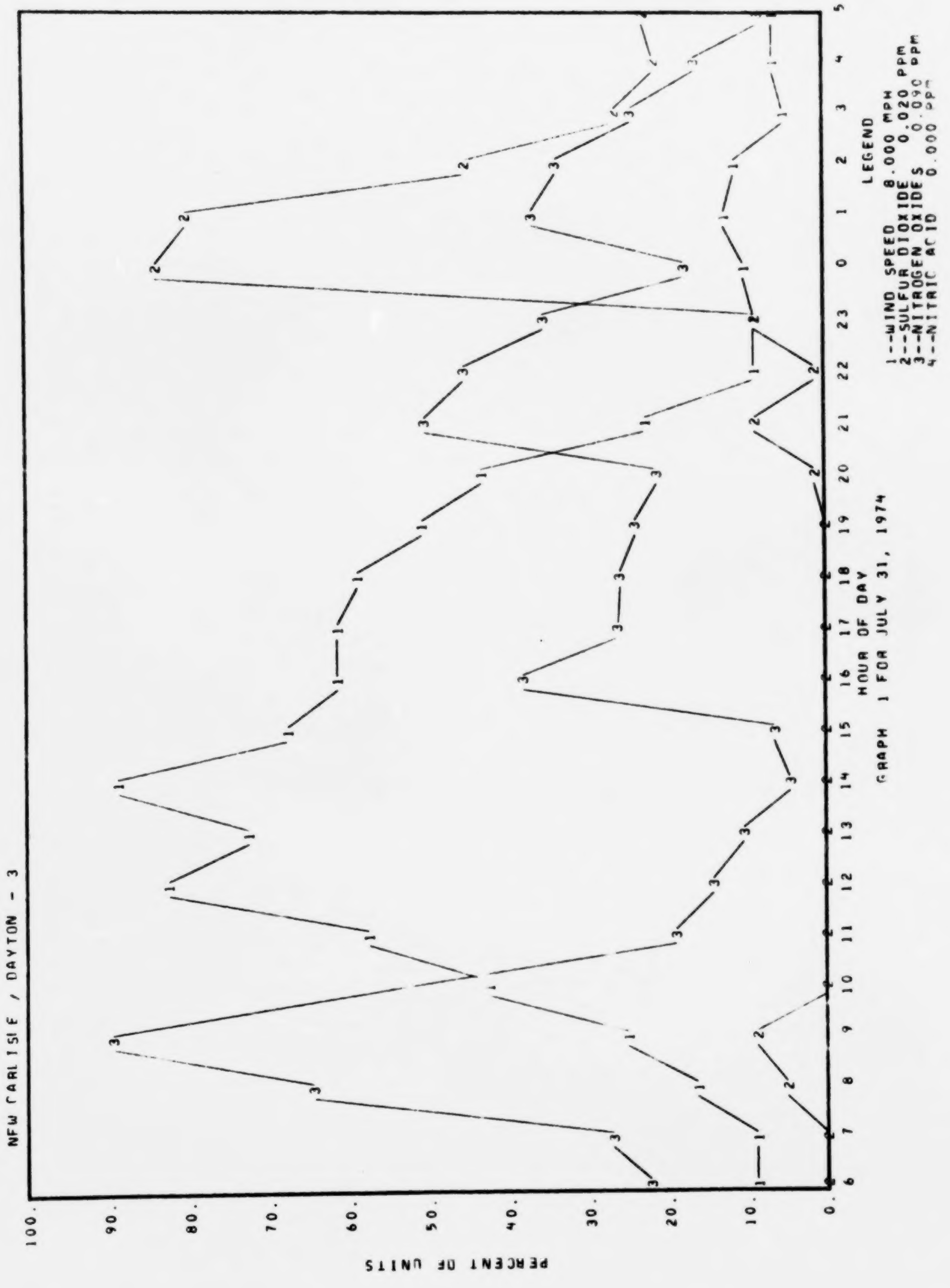


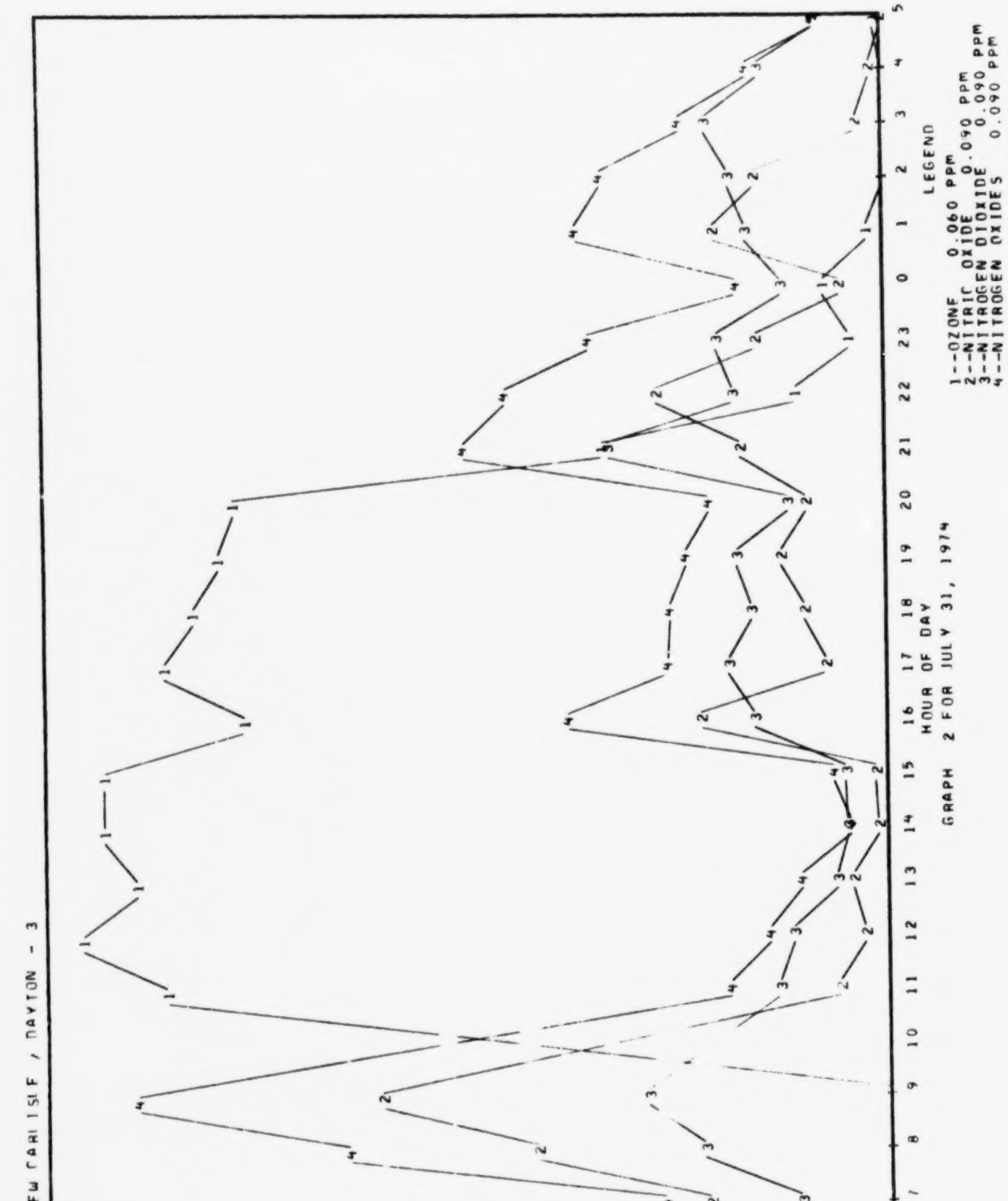
GRAPH 1 FOR JULY 30, 1974

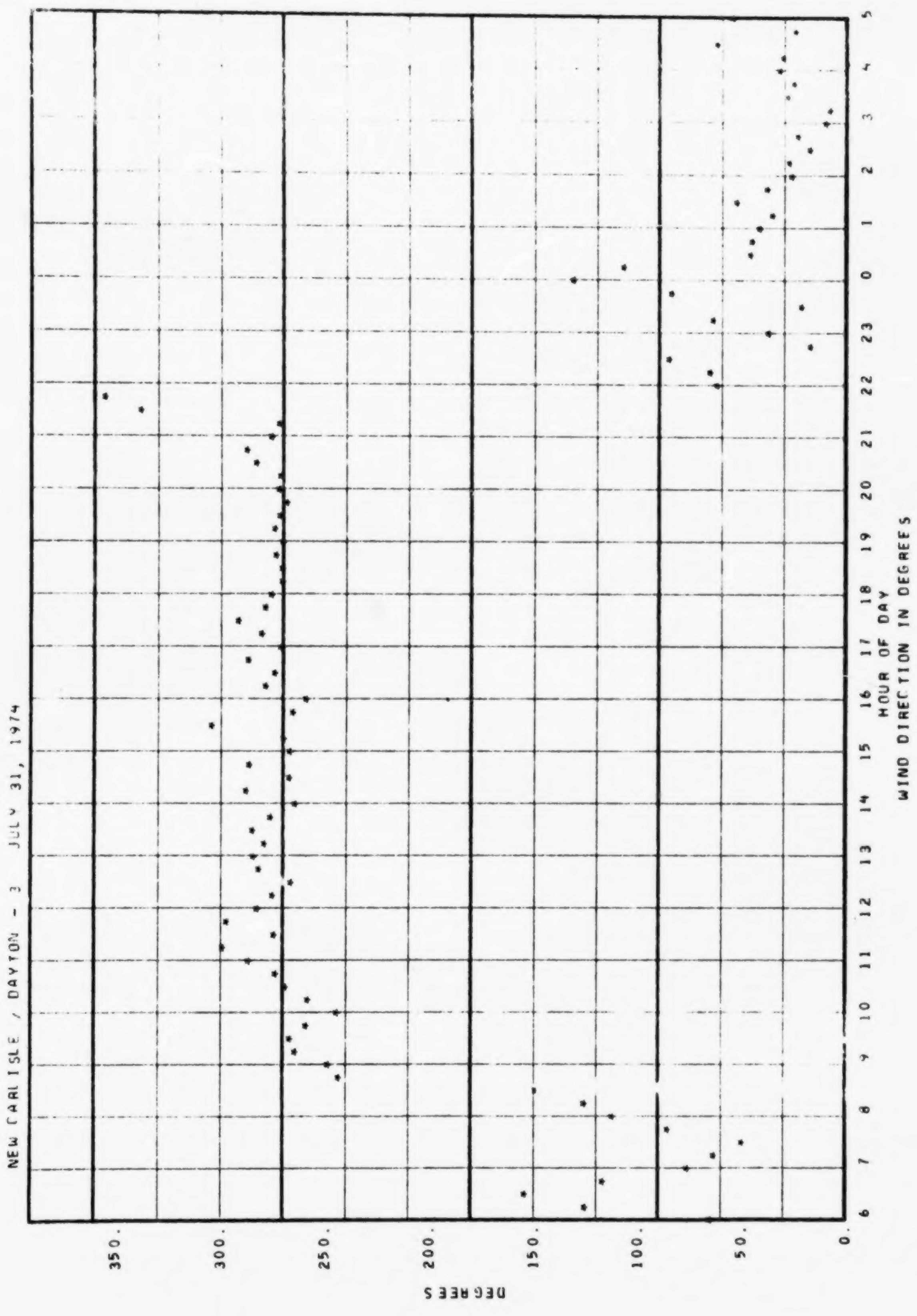


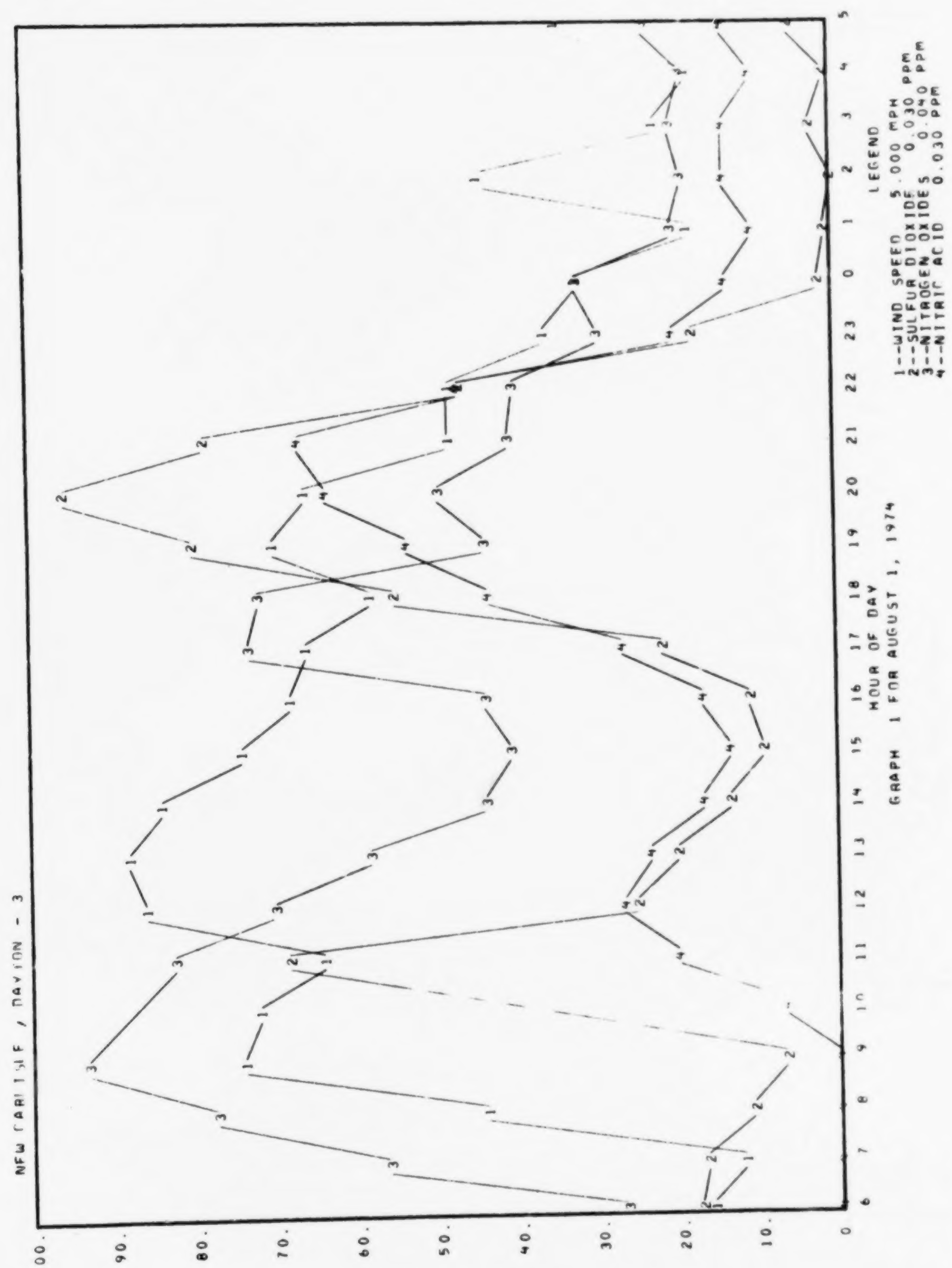
NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
0. 10. 20. 30. 40. 50. 60. 70. 80. 90. 100.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR JULY 30, 1974
LEGEND
1--OZONE 0.050 PPM
2--NITRIC OXIDE 0.060 PPM
3--NITROGEN DIOXIDE 0.050 PPM
4--NITROGEN OXIDES 0.060 PPM

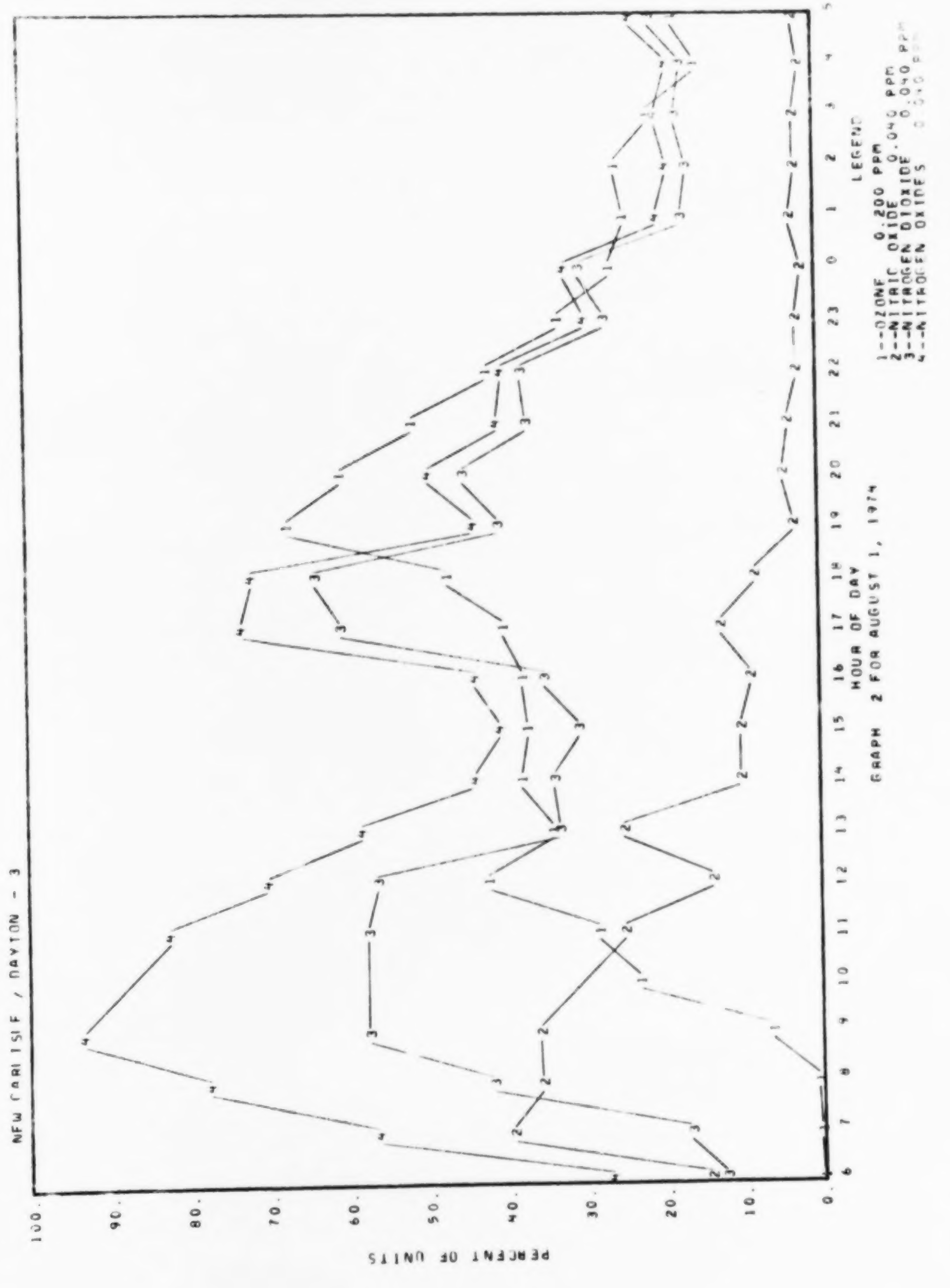

NEW CARLISLE / DAYTON - 3 JULY 30, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5


NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 1 FOR JULY 31, 1974
LEGEND
1--WIND SPEED 8.000 MPH
2--SULFUR DIOXIDE 0.020 PPM
3--NITROGEN OXIDES 0.090 PPM
4--NITRIC ACID 0.000 PPM

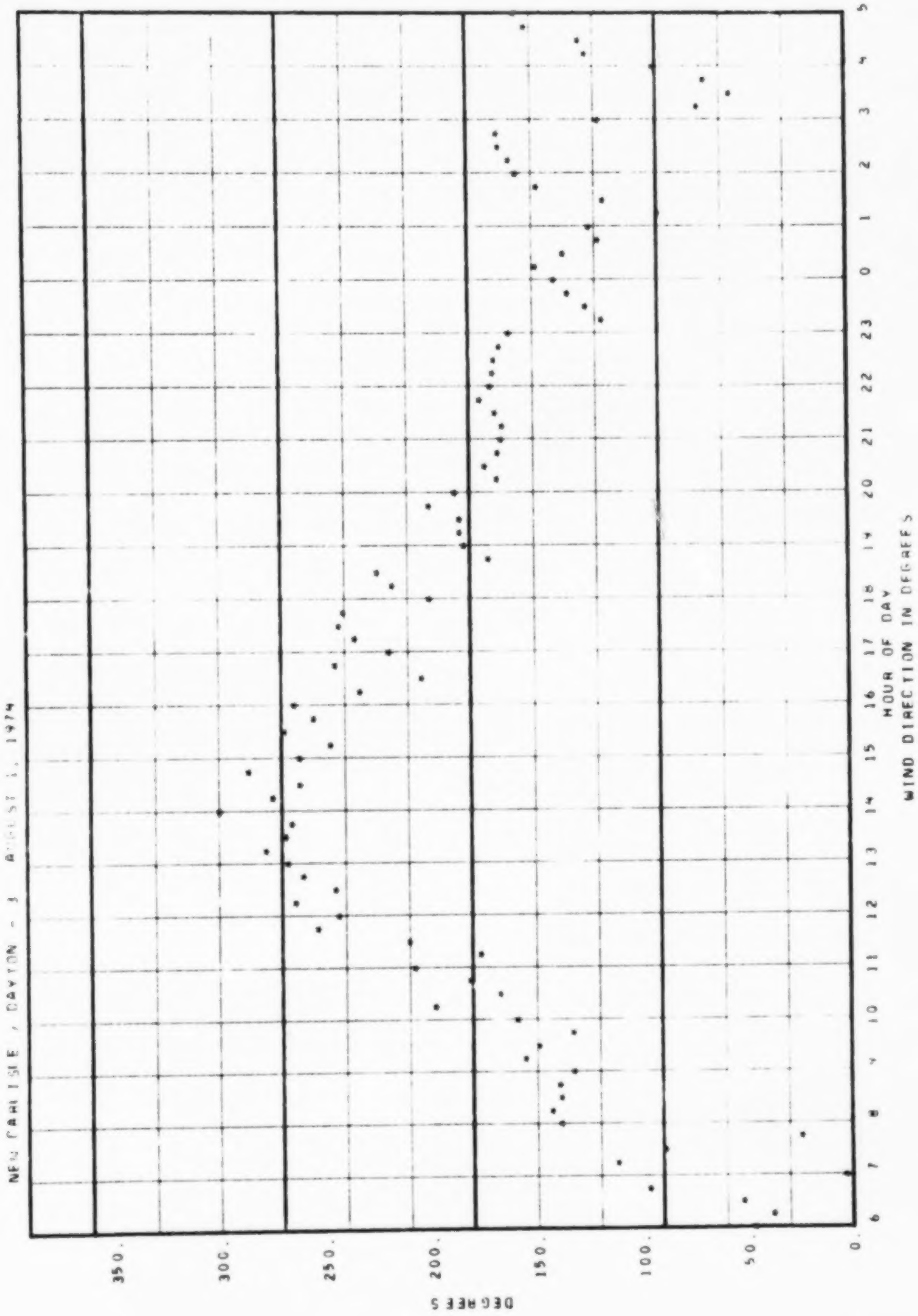

NEW CARLISLE , DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 2 FOR JULY 31, 1974
LEGEND
1--OZONE 0.060 PPM
2--NITRIC OXIDE 0.090 PPM
3--NITROGEN DIOXIDE 0.090 PPM
4--NITROGEN OXIDES 0.090 PPM

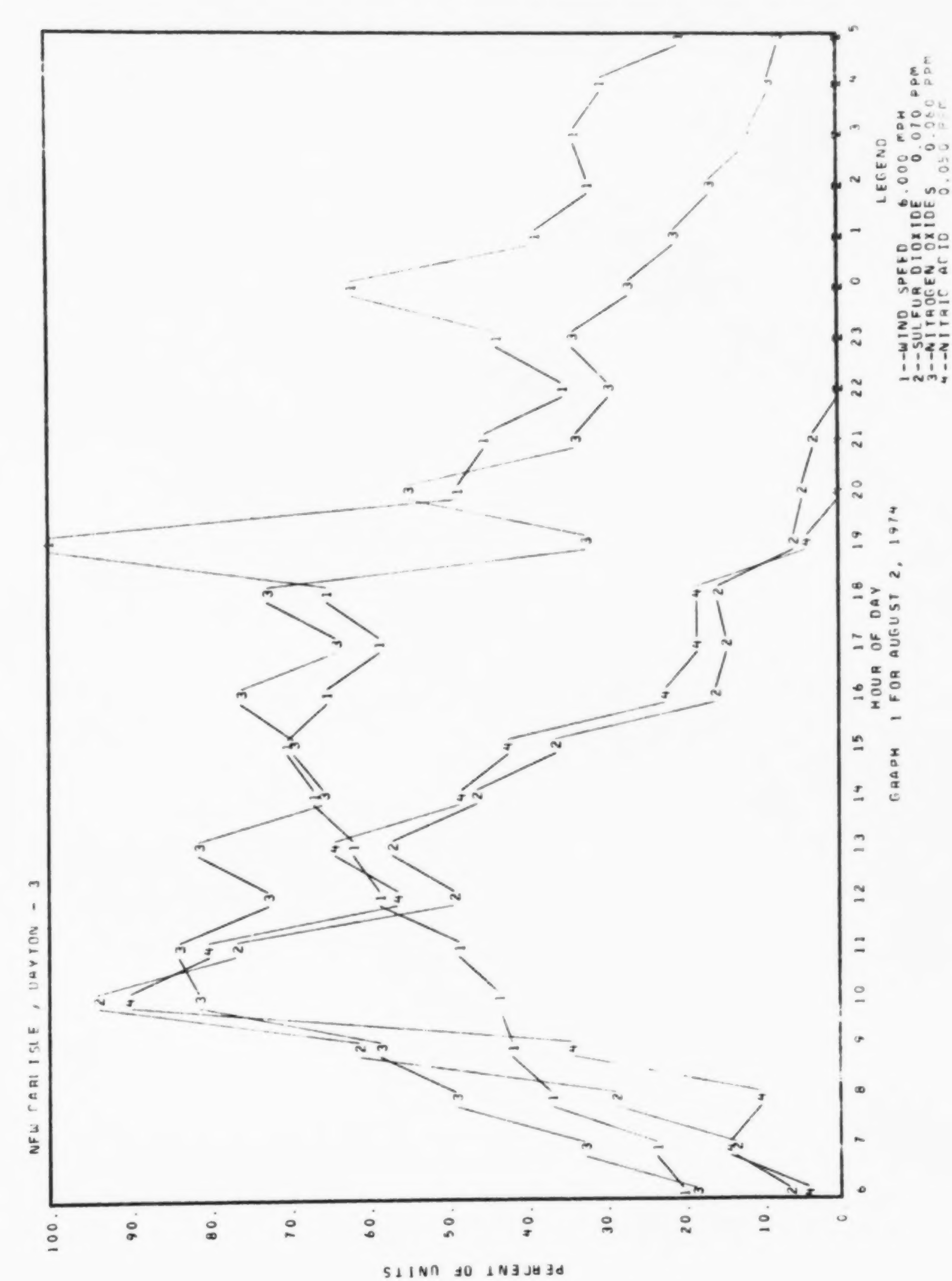

NEW CARLISLE / DAYTON - 3 JULY 31, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES

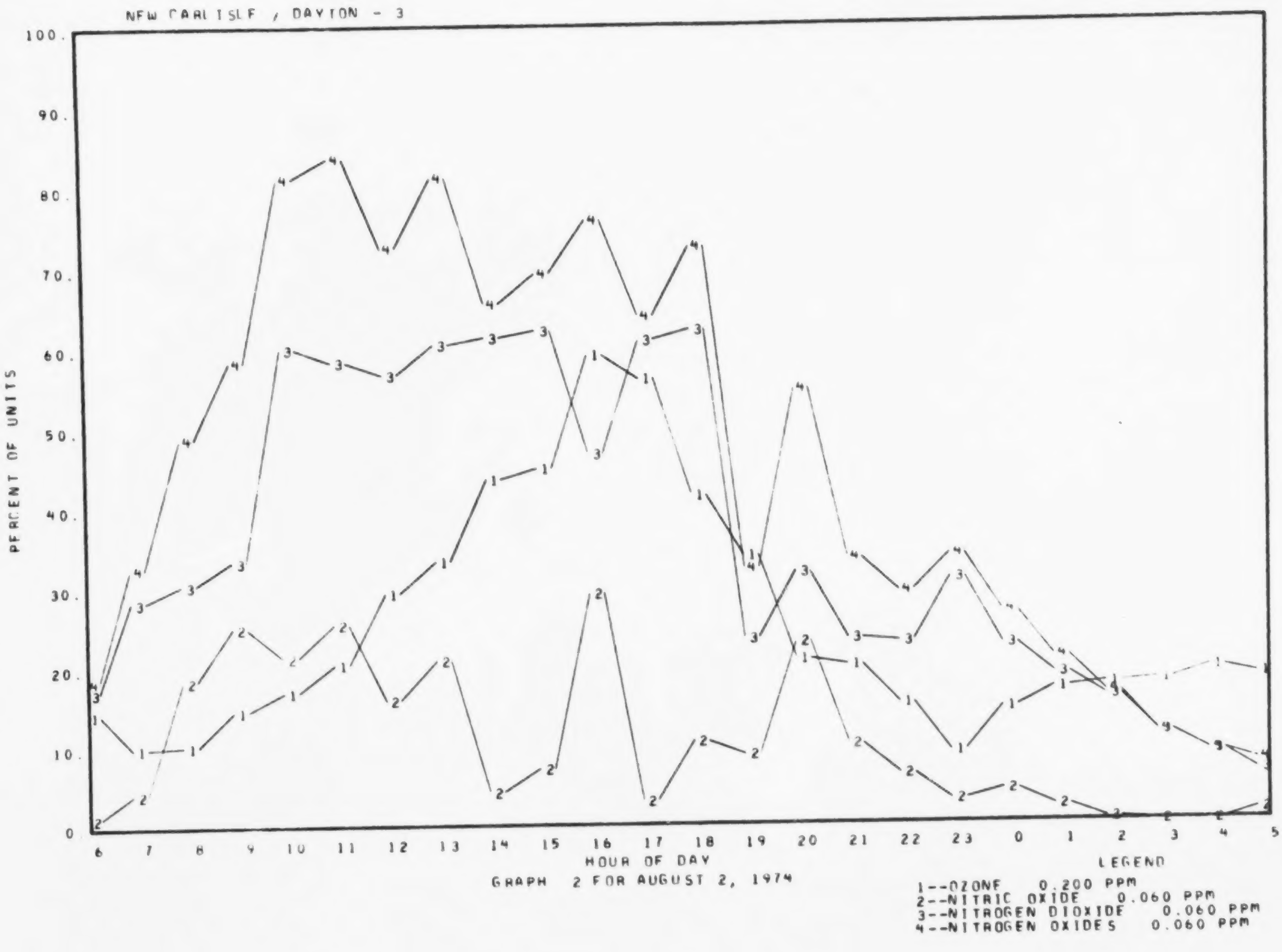

NEW CARLISLE , DAYTON - 3
PERCENT OF UNITS
0
10.
20.
30.
40.
50.
60.
70.
80.
90.
100.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 1 FOR AUGUST 1, 1974
LEGEND
1--WIND SPEED 5.000 MPH
2--SULFUR DIOXIDE 0.030 PPM
3--NITROGEN OXIDES 0.040 PPM
4--NITRIC ACID 0.030 PPM



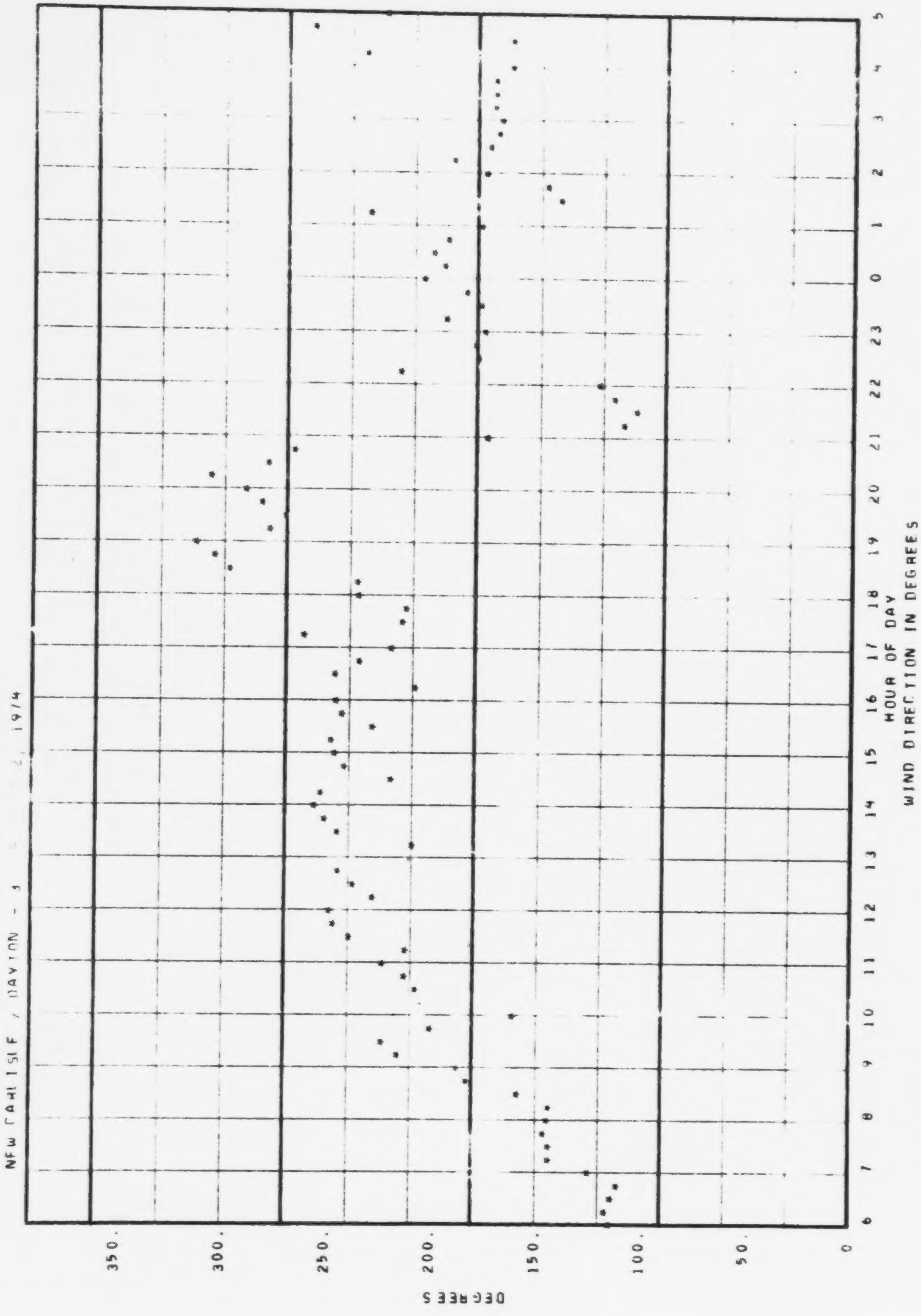
GRAPH 2 FOR AUGUST 1, 1974

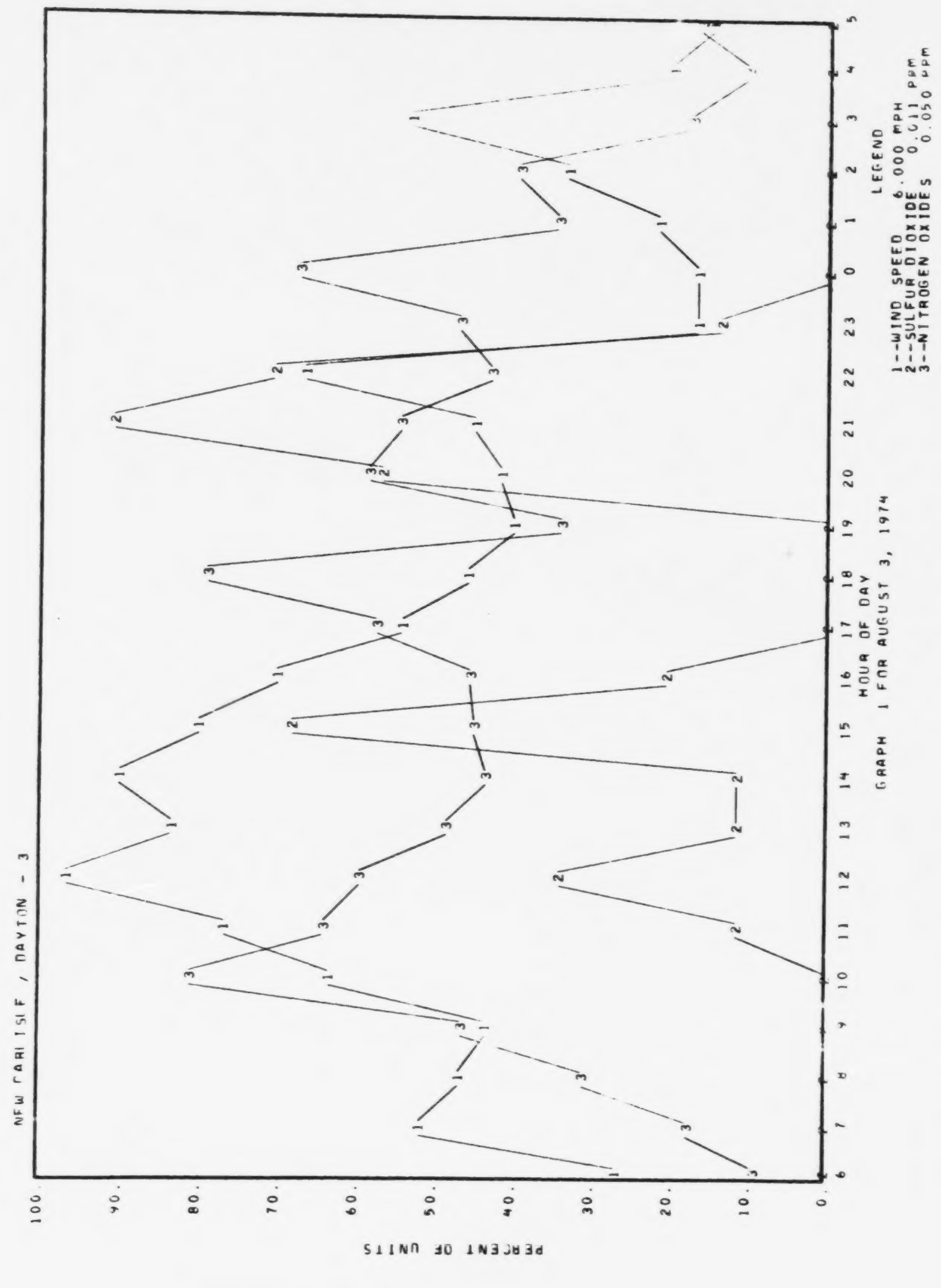

NEW CARLISLE , DAYTON - 3
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5


NEW CARLISLE , DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 1 FOR AUGUST 2, 1974
LEGEND
1--WIND SPEED 6.000 MPH
2--SULFUR DIOXIDE 0.070 PPM
3--NITROGEN OXIDES 0.060 PPM
4--NITRIC ACID 0.050 PPM

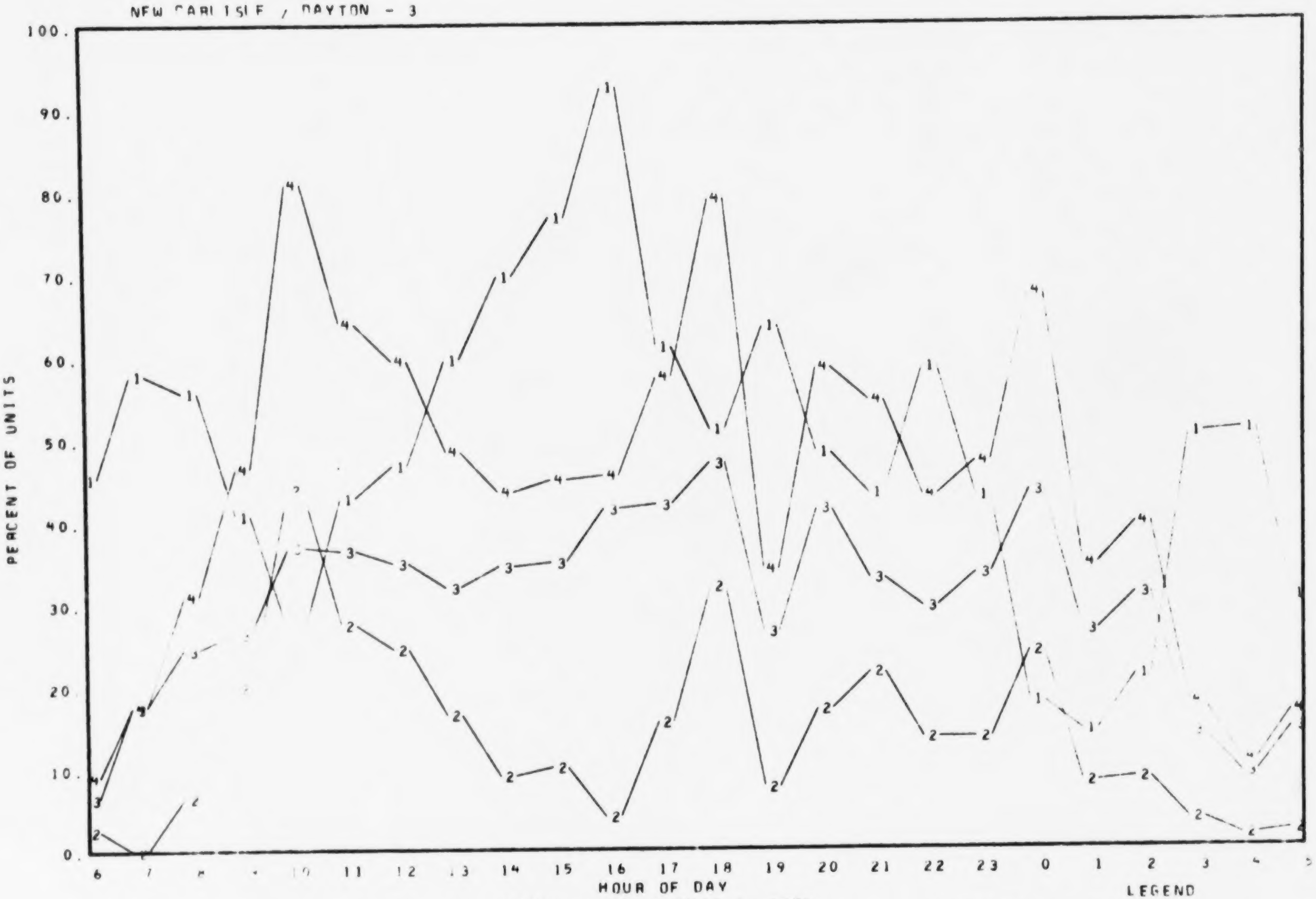


GRAPH 2 FOR AUGUST 2, 1974


WIND DIRECTION IN DEGREES
HOUR OF DAY
DEGREES
0
50.
100.
150.
200.
250.
300.
350.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
1974

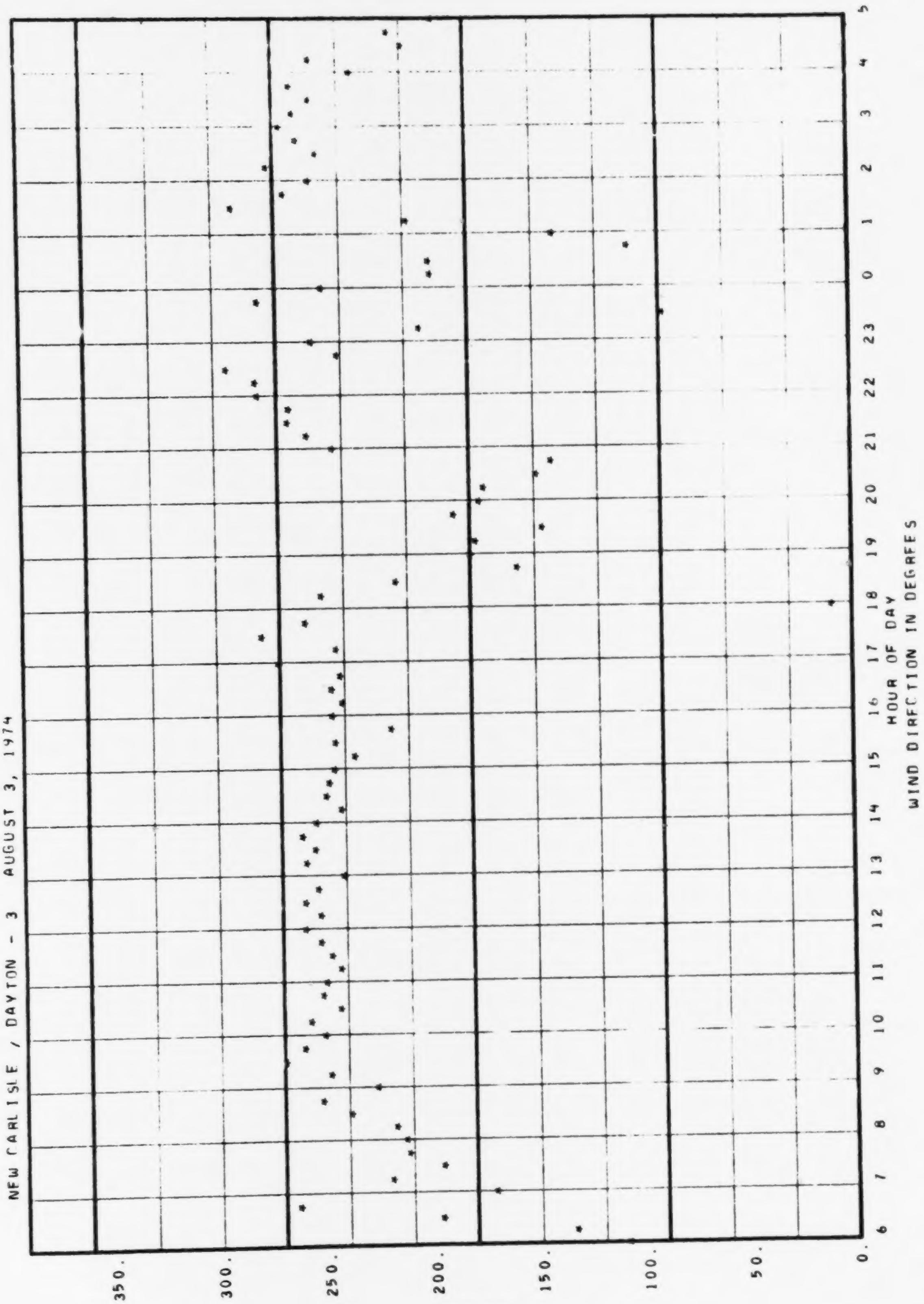


GRAPH 1 FOR AUGUST 3, 1974

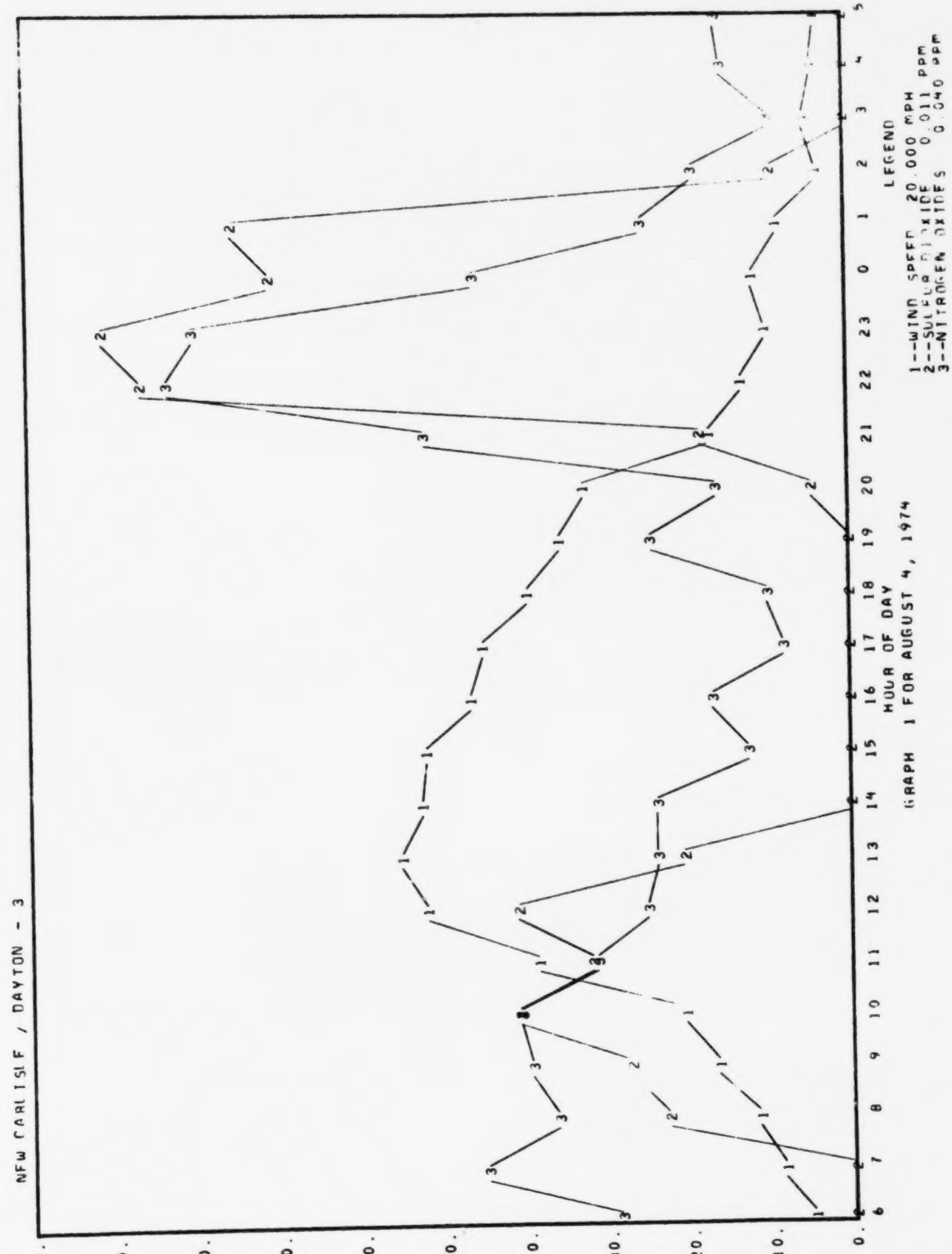


GRAPH 2 FOR AUGUST 3, 1974

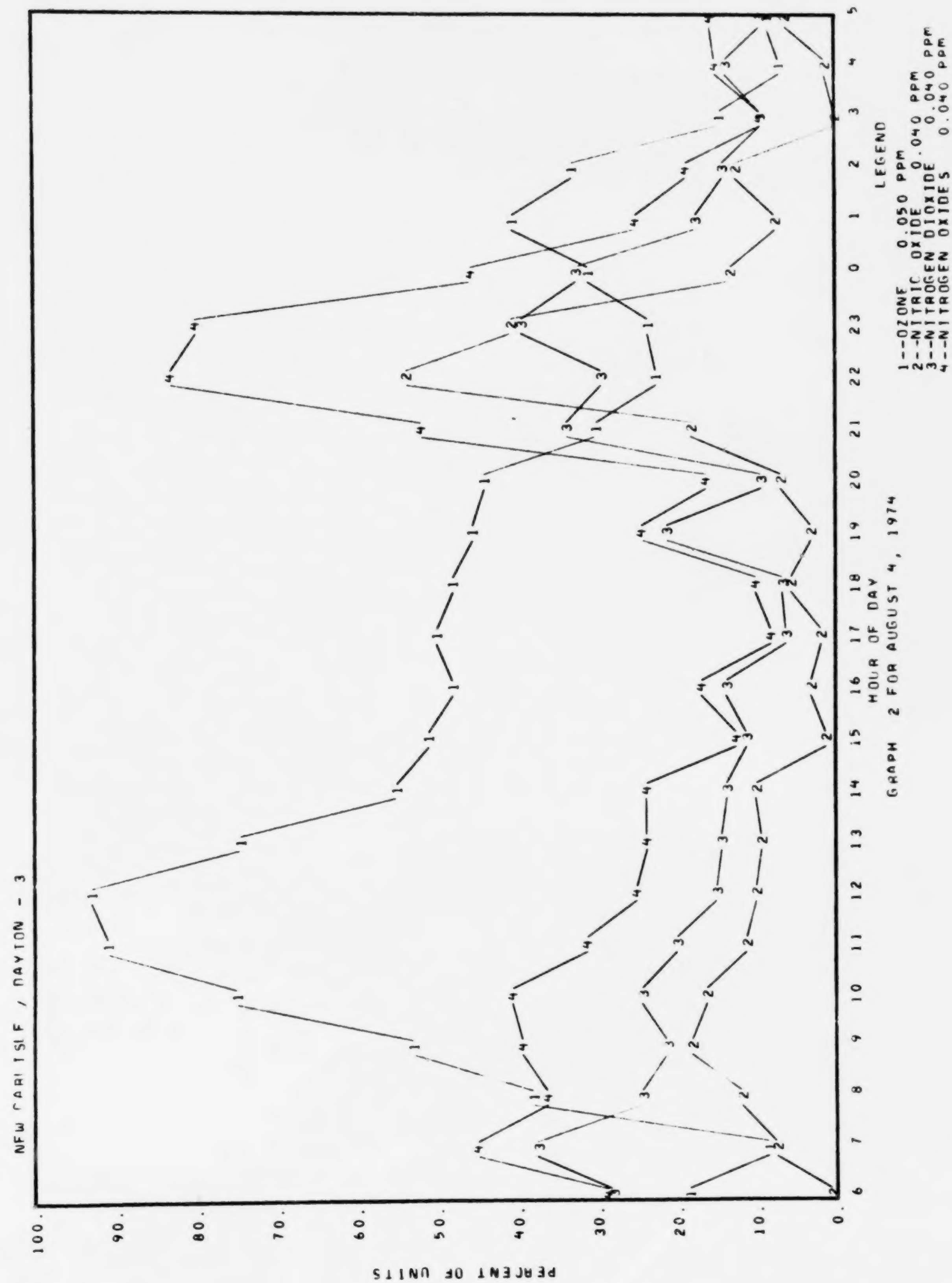
LEGEND
1--OZONE 0.070 PPM
2--NITRIC OXIDE 0.050 PPM
3--NITROGEN DIOXIDE 0.050 PPM
4--NITROGEN OXIDES 0.050 PPM

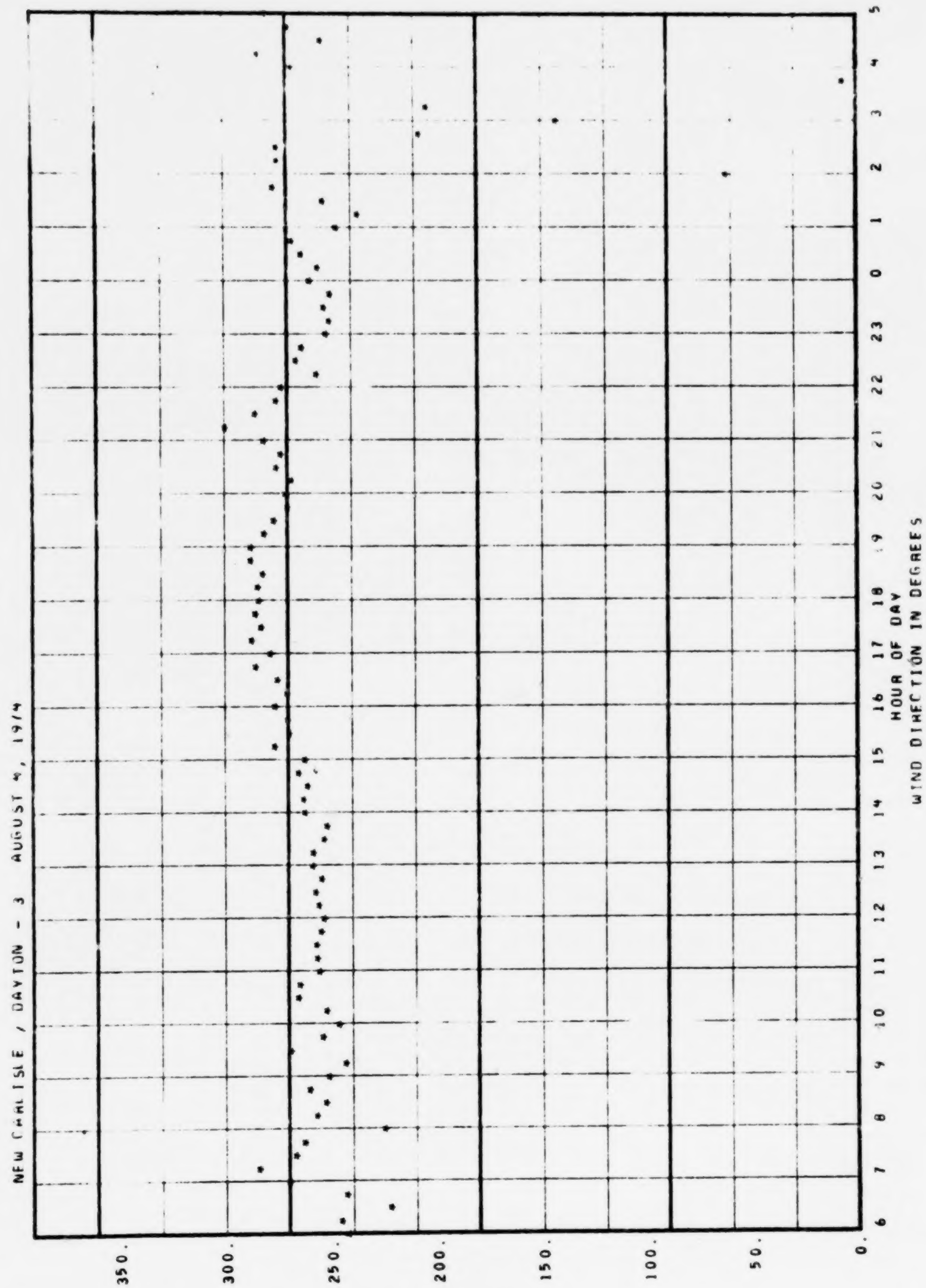


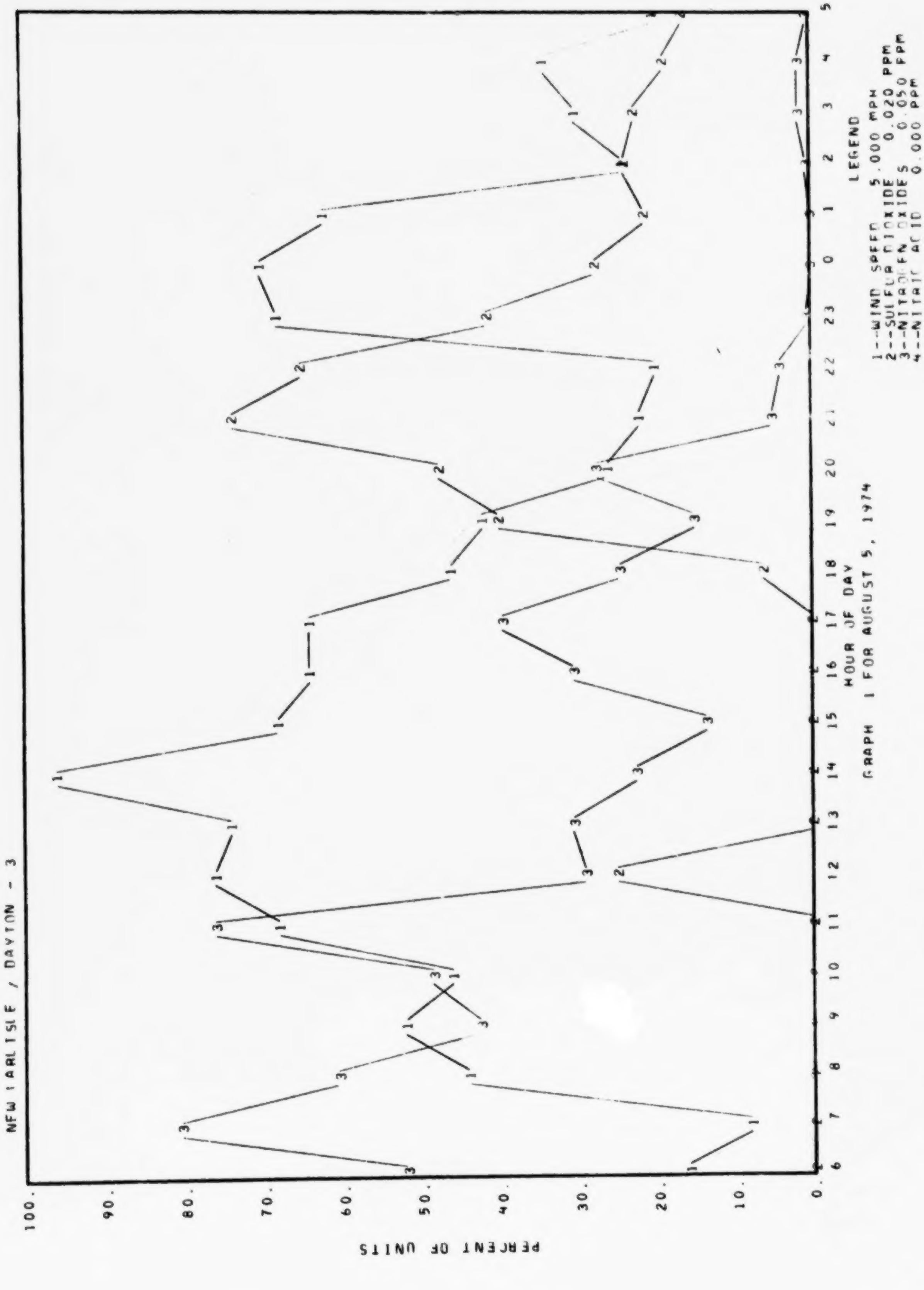
NEW CARLISLE / DAYTON - 3 AUGUST 3, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

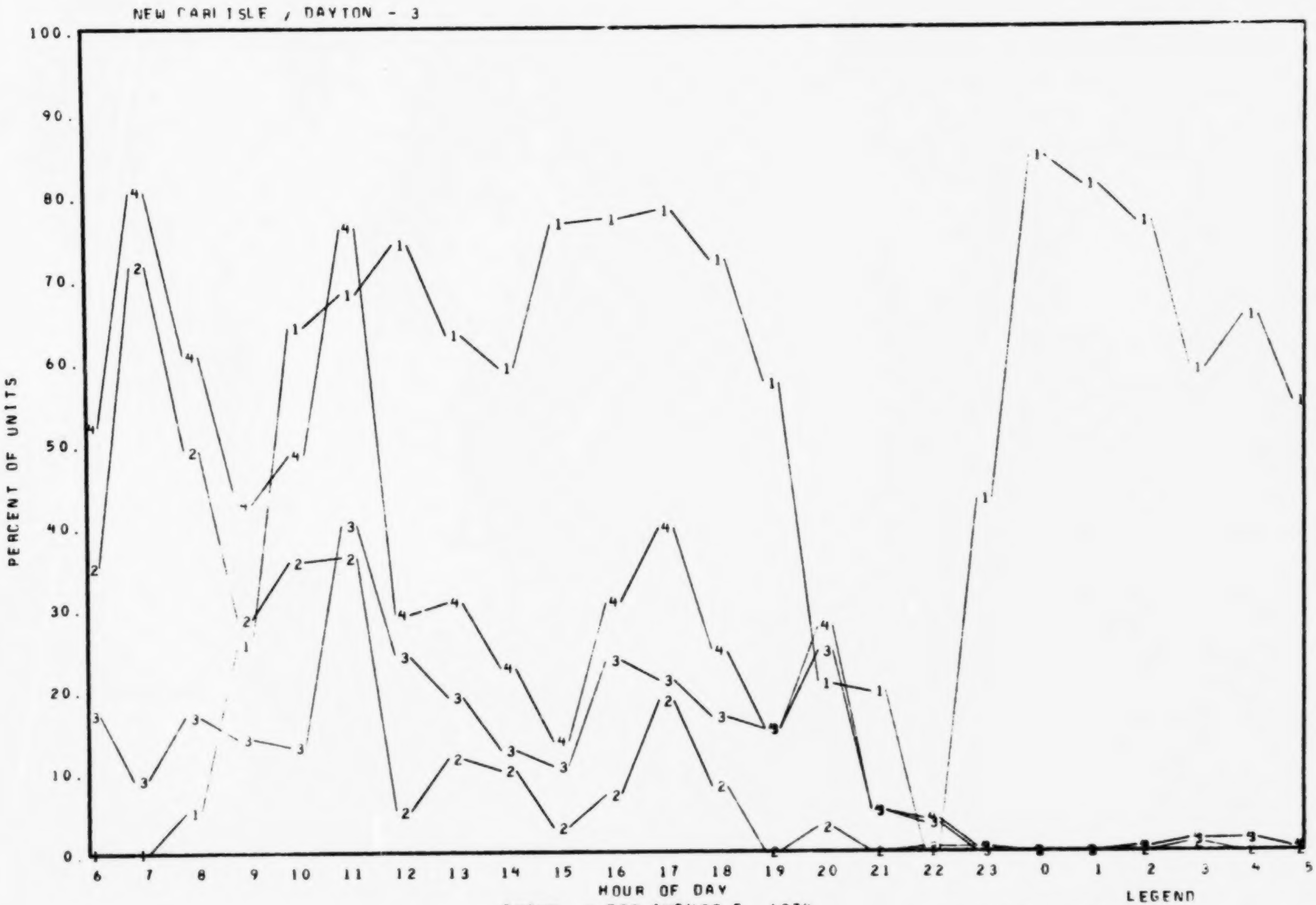


GRAPH 1 FOR AUGUST 4, 1974


NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 2 FOR AUGUST 4, 1974
LEGEND
1--OZONE 0.050 PPM
2--NITRIC OXIDE 0.040 PPM
3--NITROGEN DIOXIDE 0.040 PPM
4--NITROGEN OXIDES 0.040 PPM

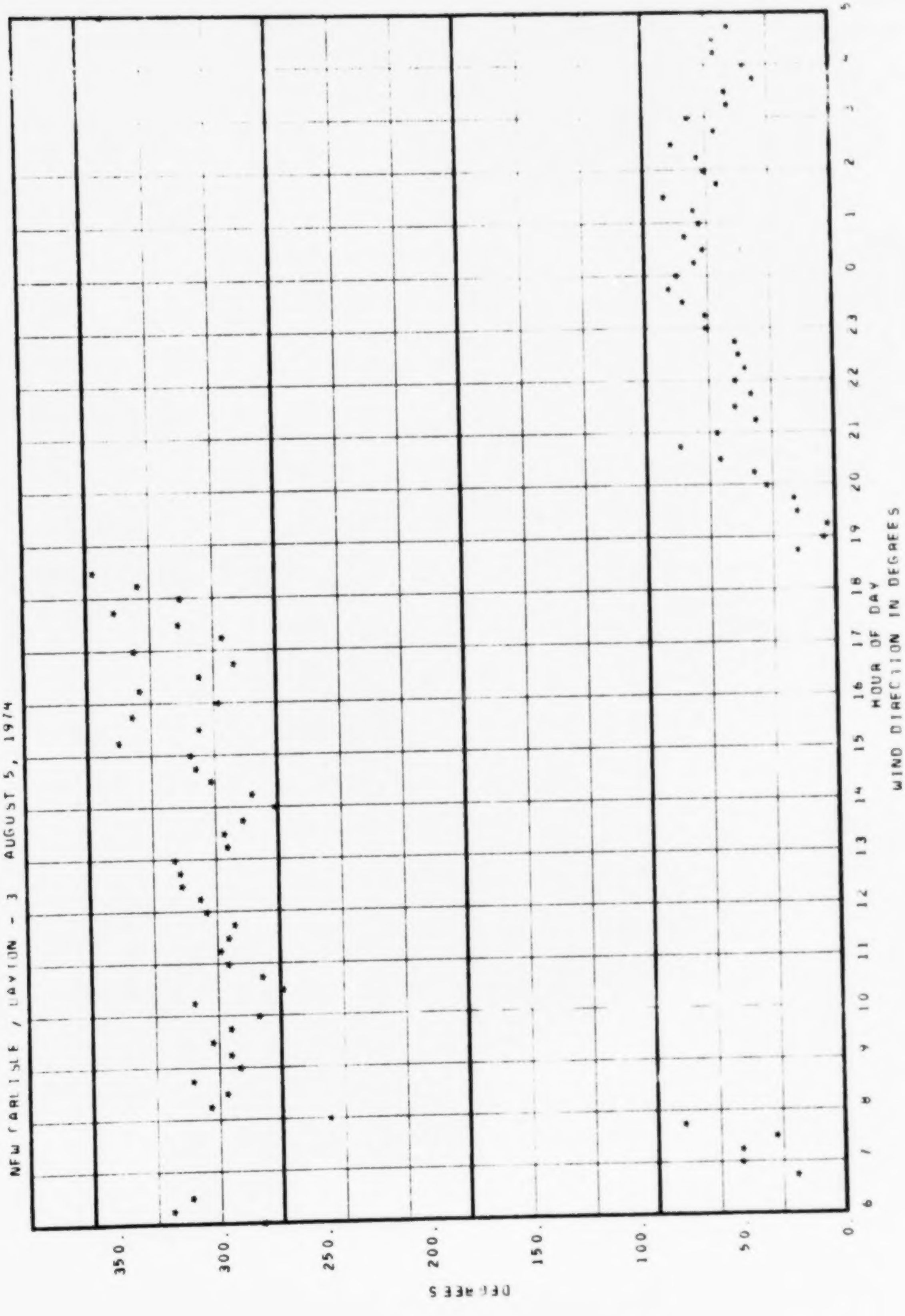

NEW CARLISLE / DAYTON - 3 AUGUST 9, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6
7
8
9
10
11
12
13
14
15
16
17
18
20
22
23
0
1
2
3
4
5

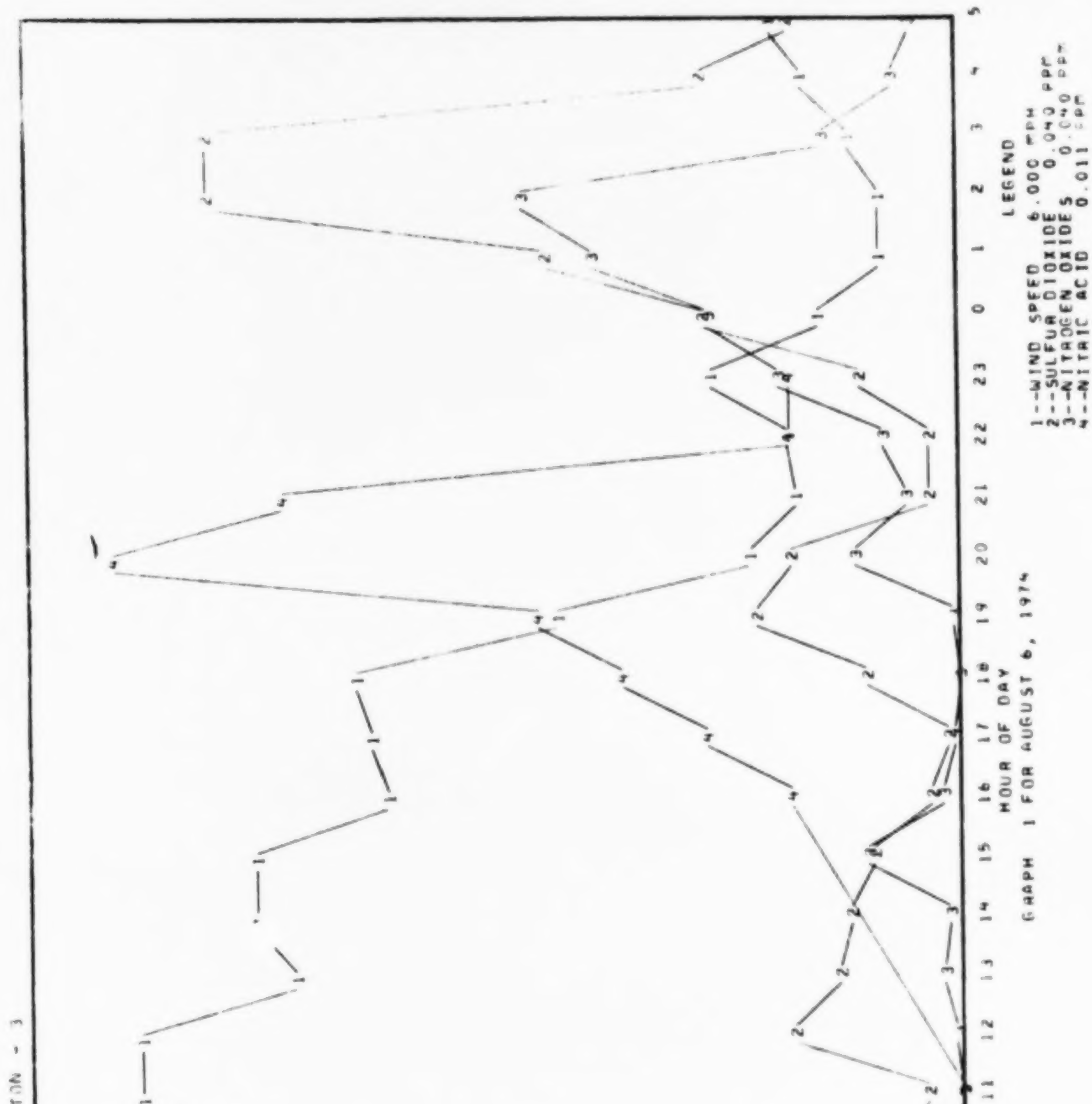

NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
0. 10. 20. 30. 40. 50. 60. 70. 80. 90. 100.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 1 FOR AUGUST 5, 1974
LEGEND
1--WIND SPEED 5.000 MPH
2--SULFUR DIOXIDE 0.020 PPM
3--NITROGEN OXIDES 0.050 PPM
4--NITRIC ACID 0.000 PPM

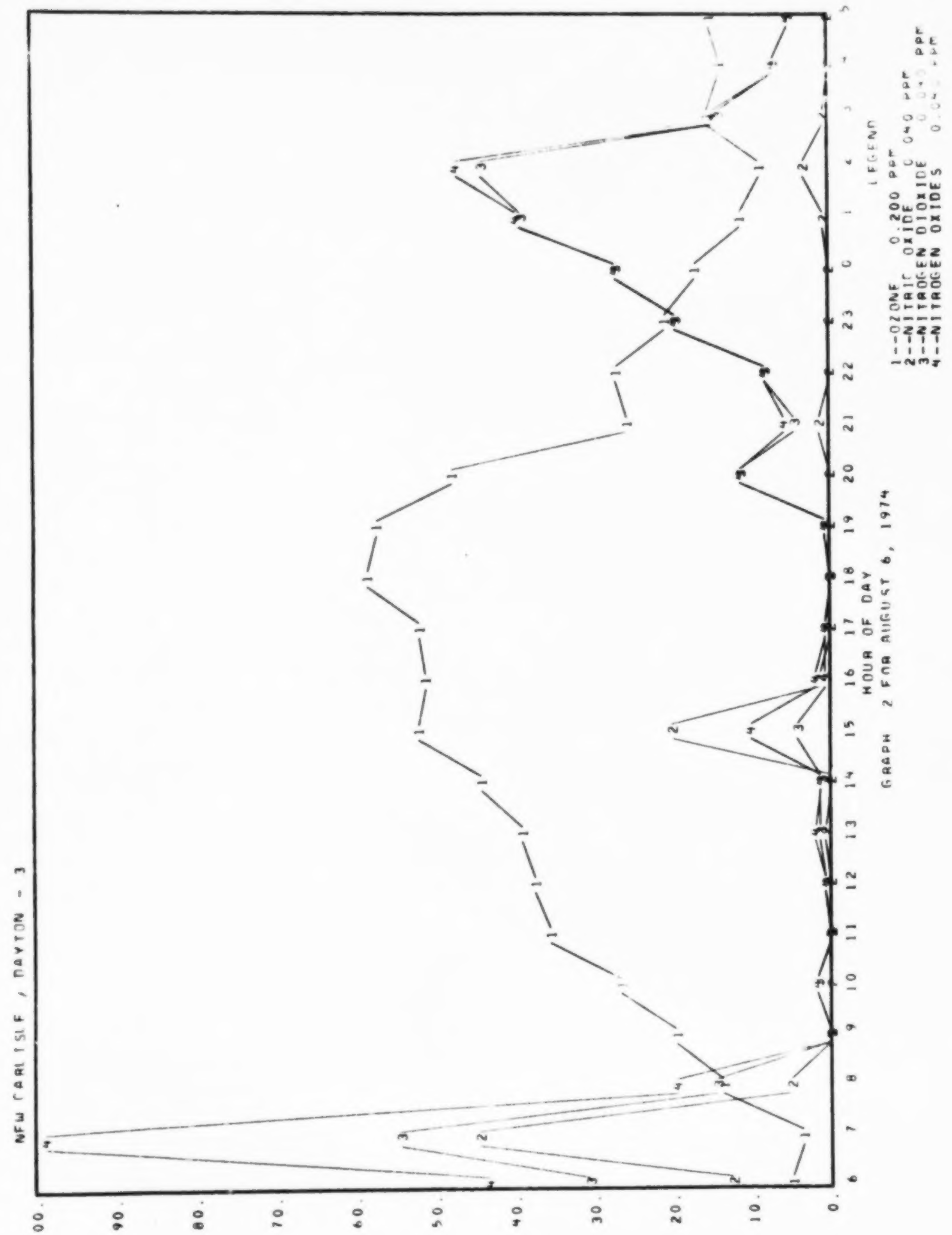


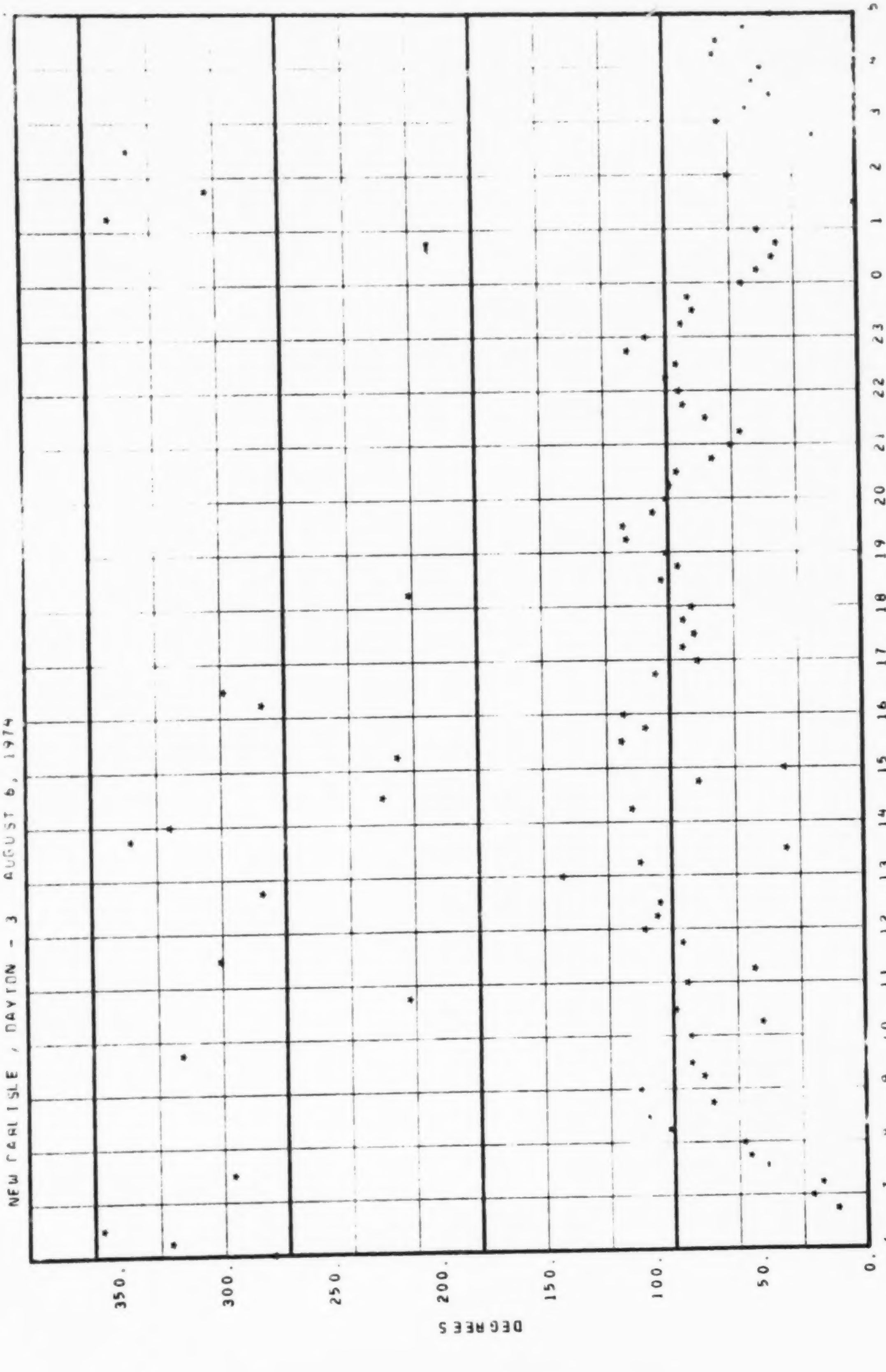
GRAPH 2 FOR AUGUST 5, 1974

LEGEND
1--OZONE 0.050 PPM
2--NITRIC OXIDE 0.050 PPM
3--NITROGEN DIOXIDE 0.050 PPM
4--NITROGEN OXIDES 0.050 PPM

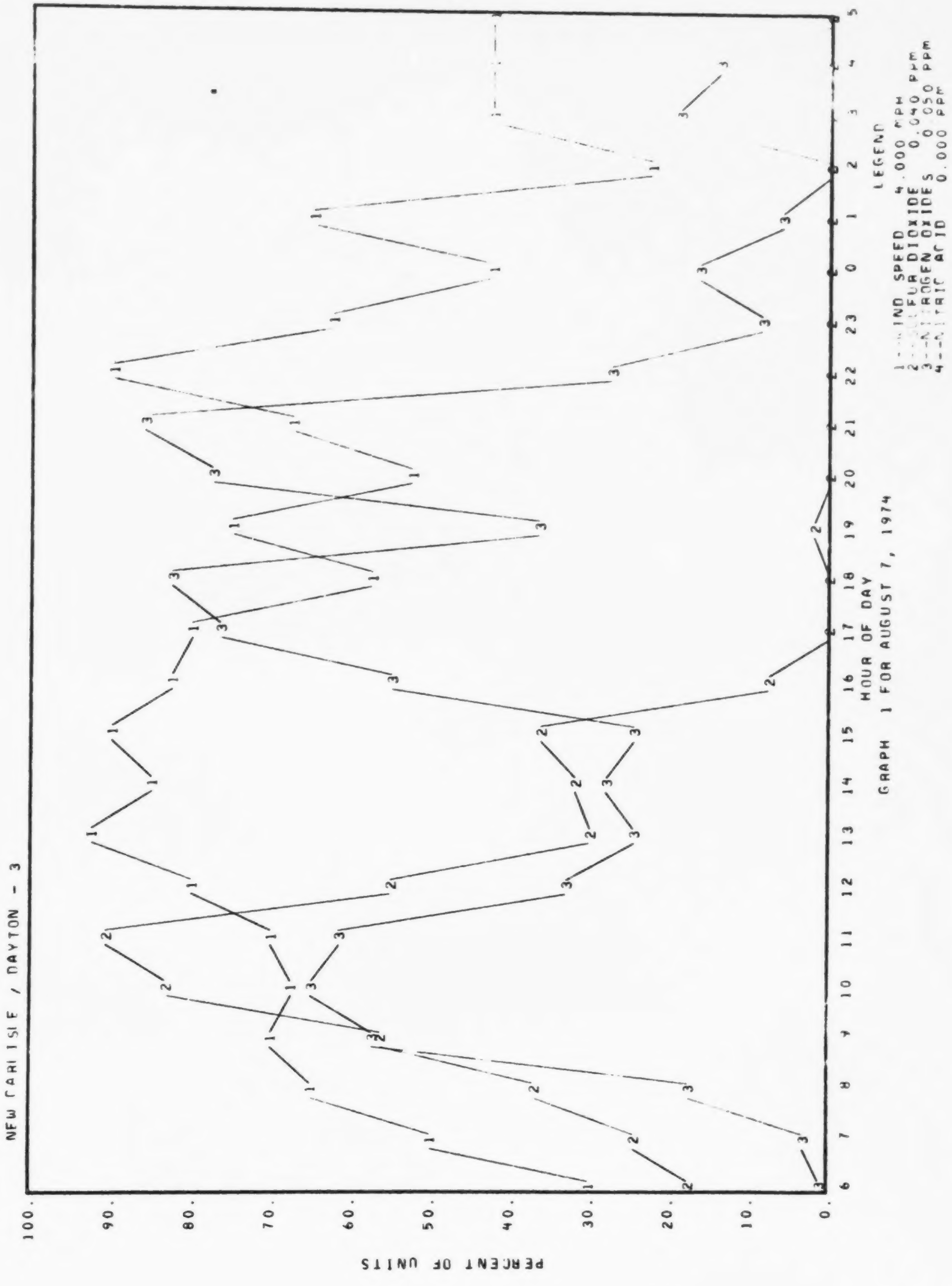

NEW CARLISLE / DAYTON - 3 AUGUST 5, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5


NEW CARLISLE , DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 1 FOR AUGUST 6, 1974
LEGEND
1--WIND SPEED 6.000 MPH
2--SULFUR DIOXIDE 0.040 PPM
3--NITROGEN OXIDES 0.040 PPM
4--NITRIC ACID 0.011 PPM

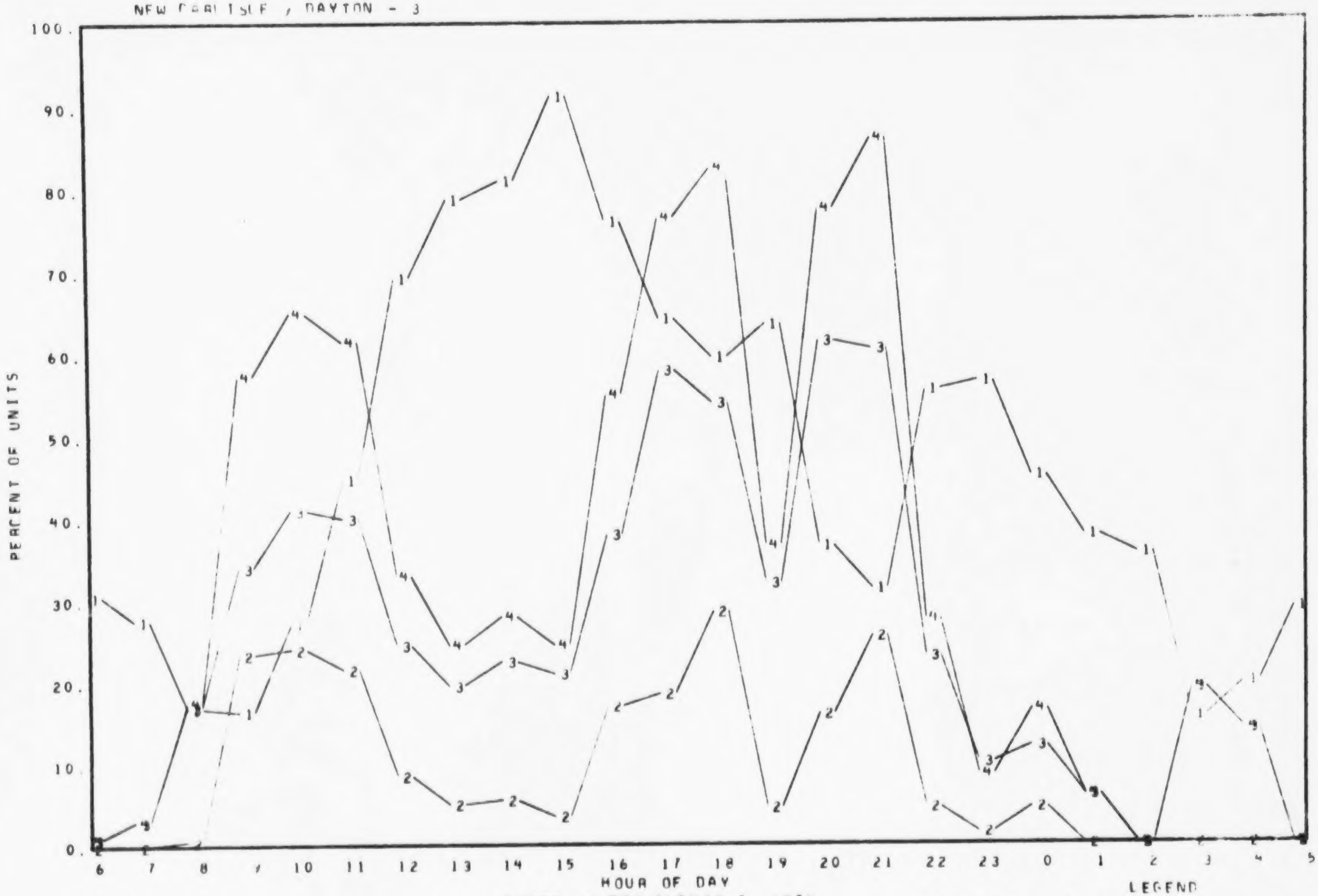

NEW CARLISLE , DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 2 FOR AUGUST 6, 1974
LEGEND
1--OZONE 0.200 PPM
2--NITRIC OXIDE 0.040 PPM
3--NITROGEN DIOXIDE
4--NITROGEN OXIDES



WIND DIRECTION IN DEGREES

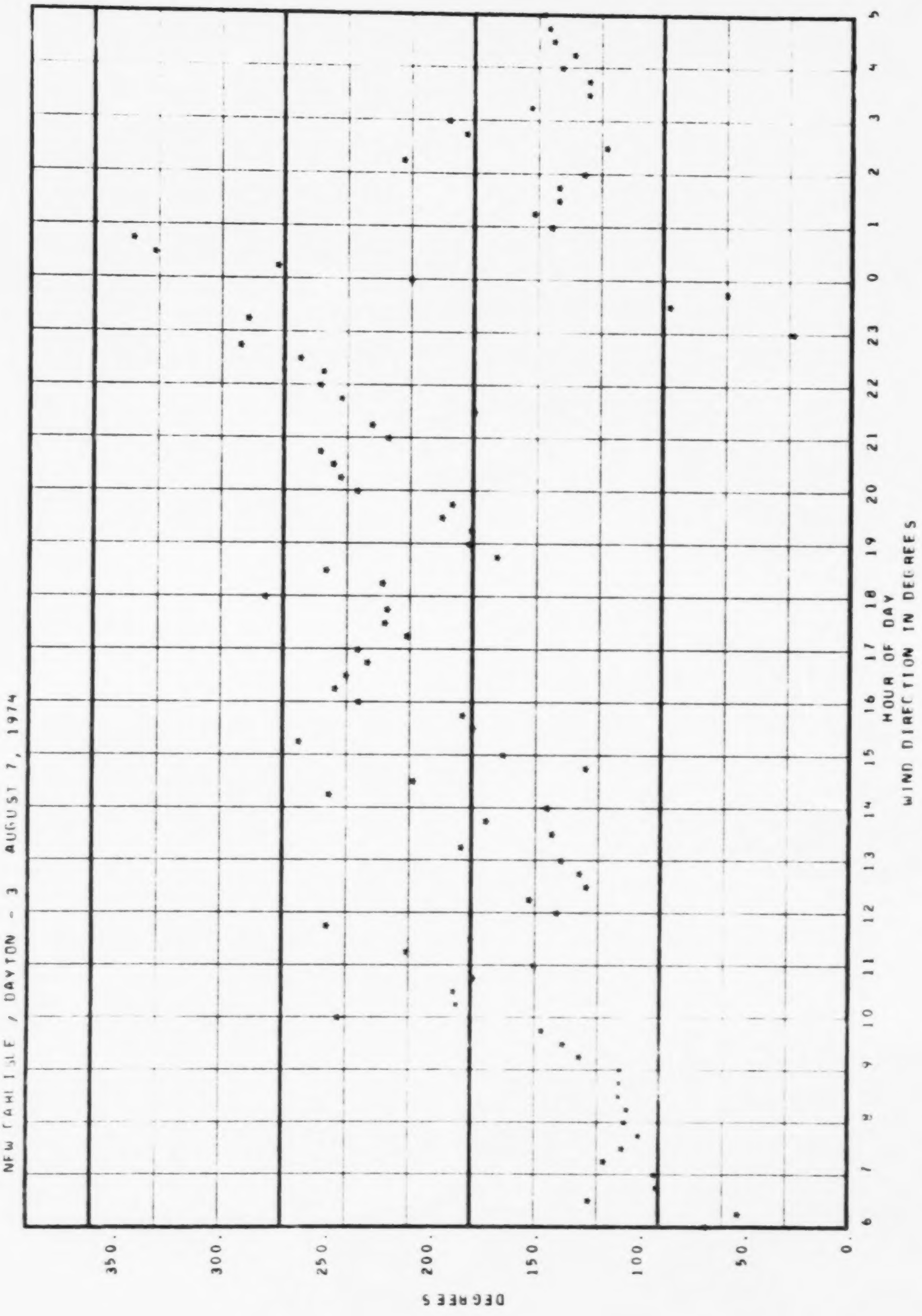

NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
100.
90.
80.
70.
60.
50.
40.
30.
20.
10.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 1 FOR AUGUST 7, 1974
LEGEND
1--WIND SPEED 4.000 MPH
2--SULFUR DIOXIDE 0.040 PPM
3--NITROGEN OXIDES 0.050 PPM
4--NITRIC ACID 0.000 PPM

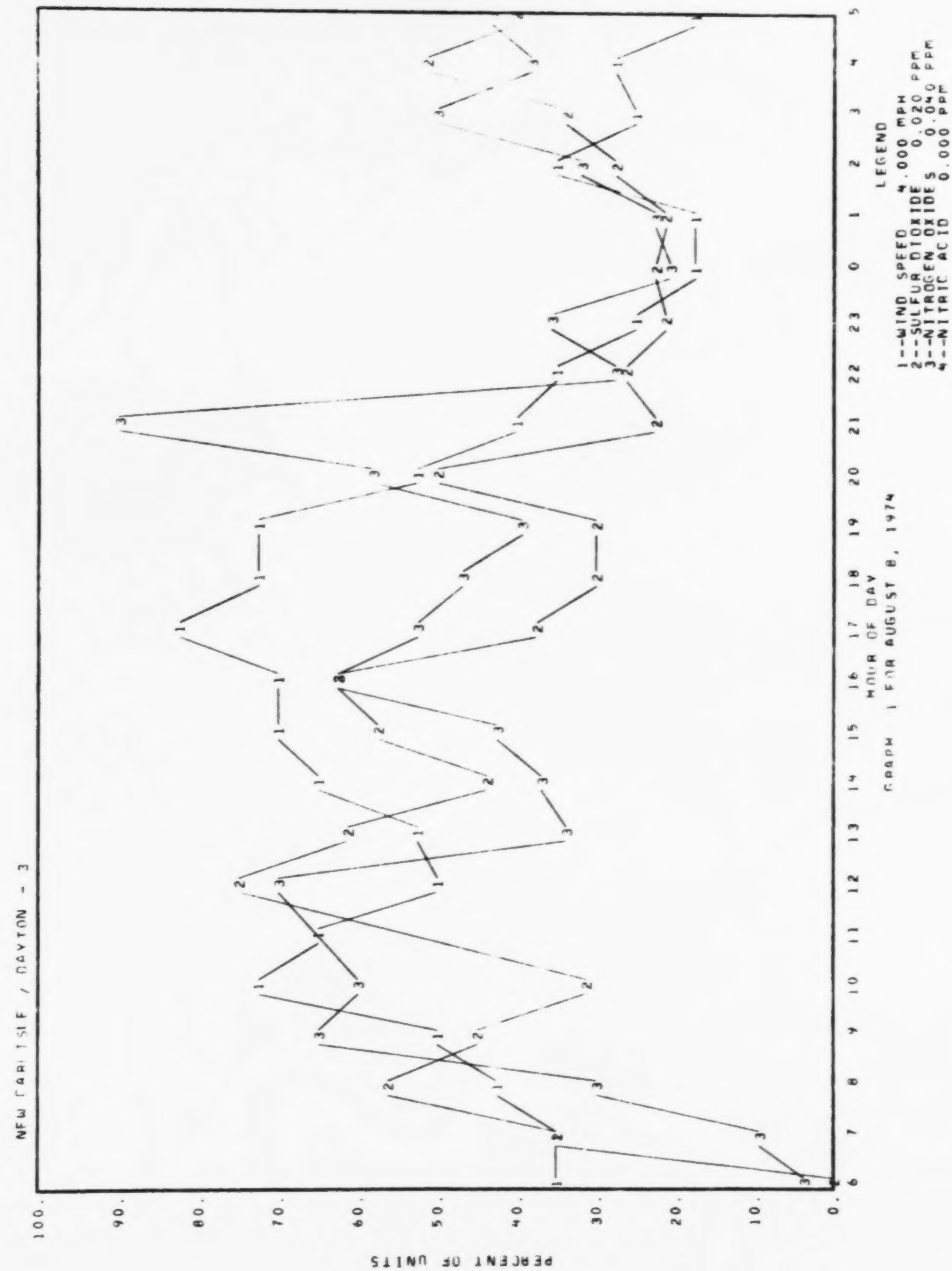
NEW CARLISLE , DAYTON - 3

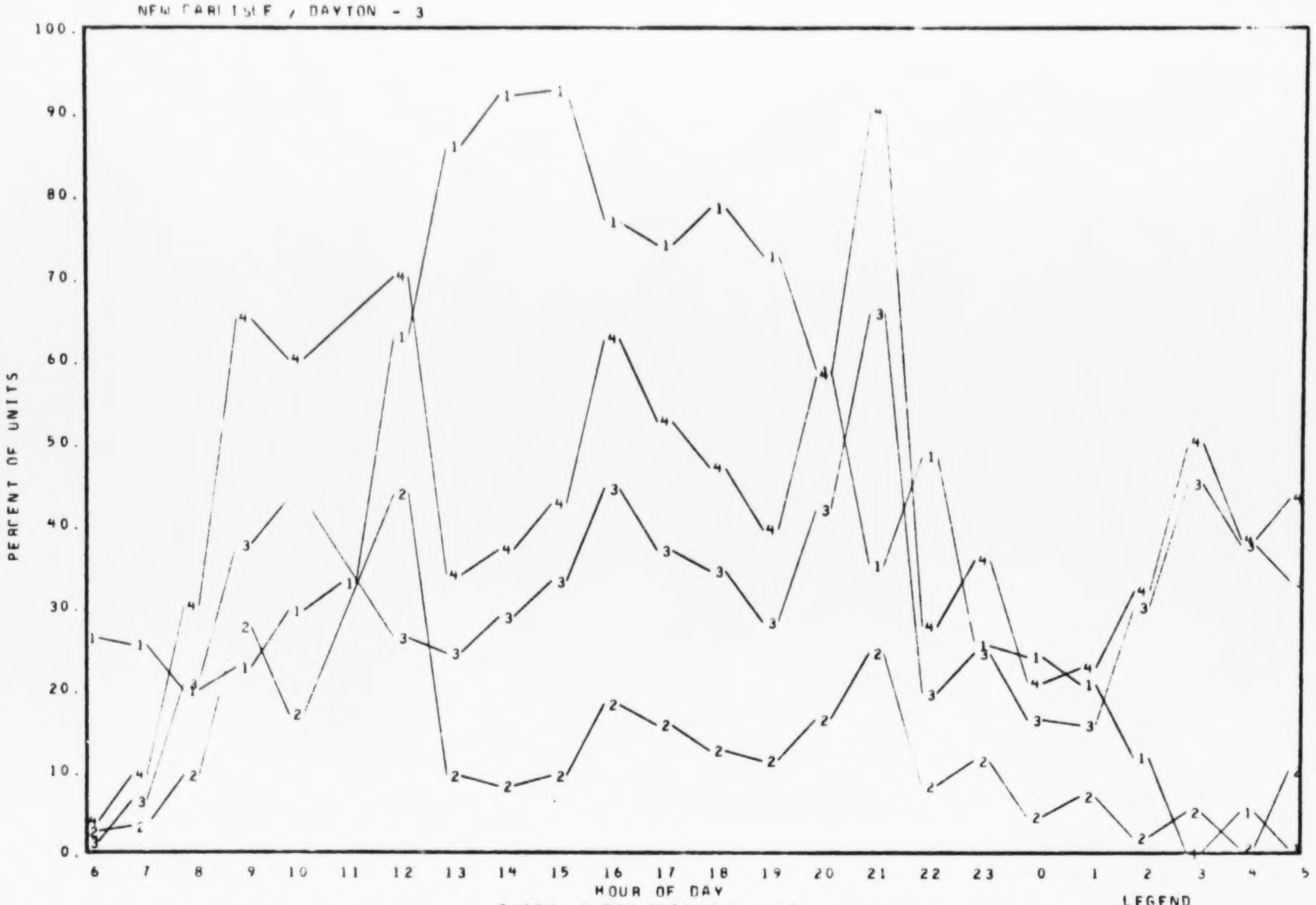


GRAPH 2 FOR AUGUST 7, 1974

LEGEND
1--OZONE 0.100 PPM
2--NITRIC OXIDE 0.050 PPM
3--NITROGEN DIOXIDE 0.050 PPM
4--NITROGEN OXIDES 0.050 PPM

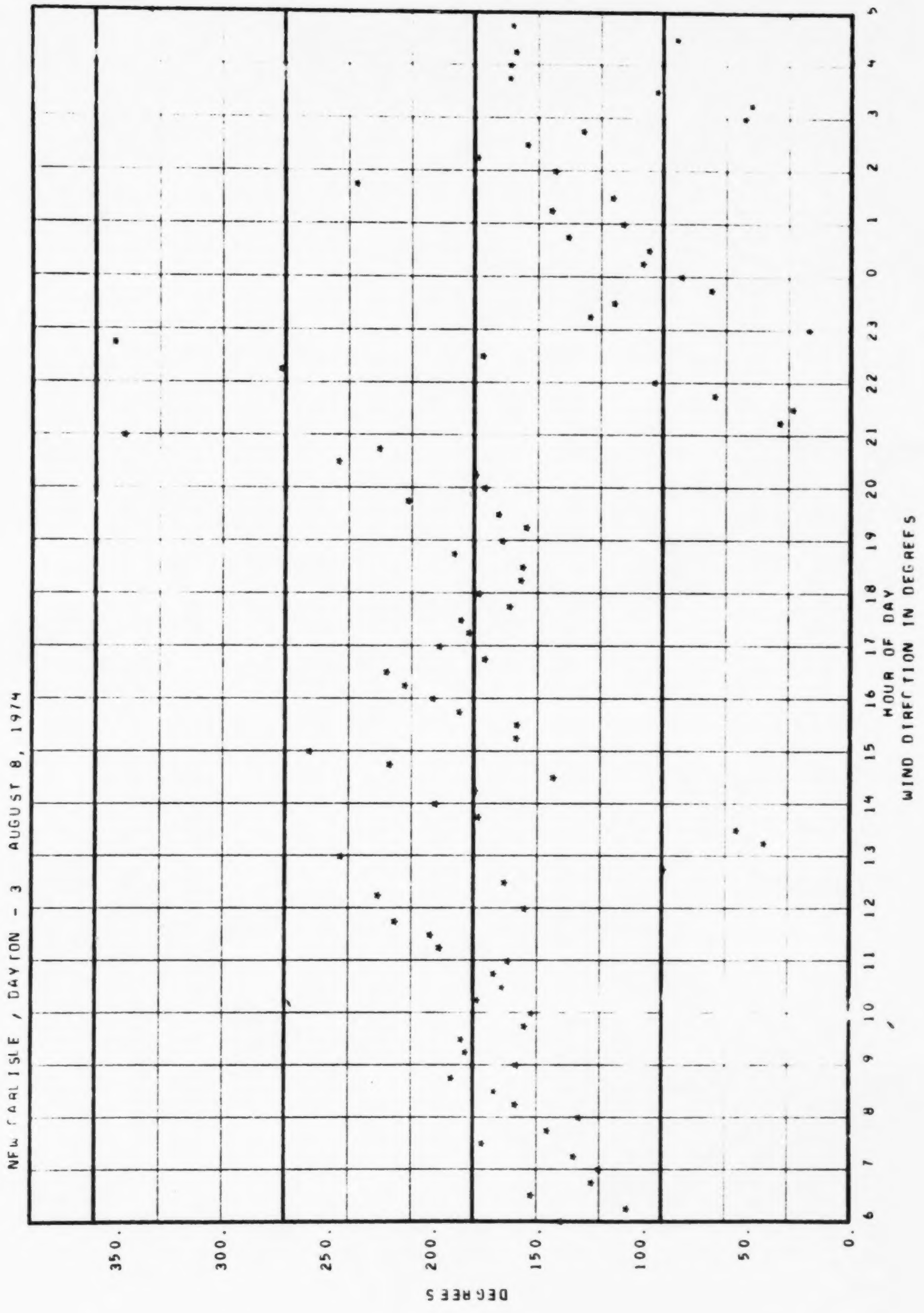

NEW CARLISLE / DAYTON - 3 AUGUST 7, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350. 300. 250. 200. 150. 100. 50. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

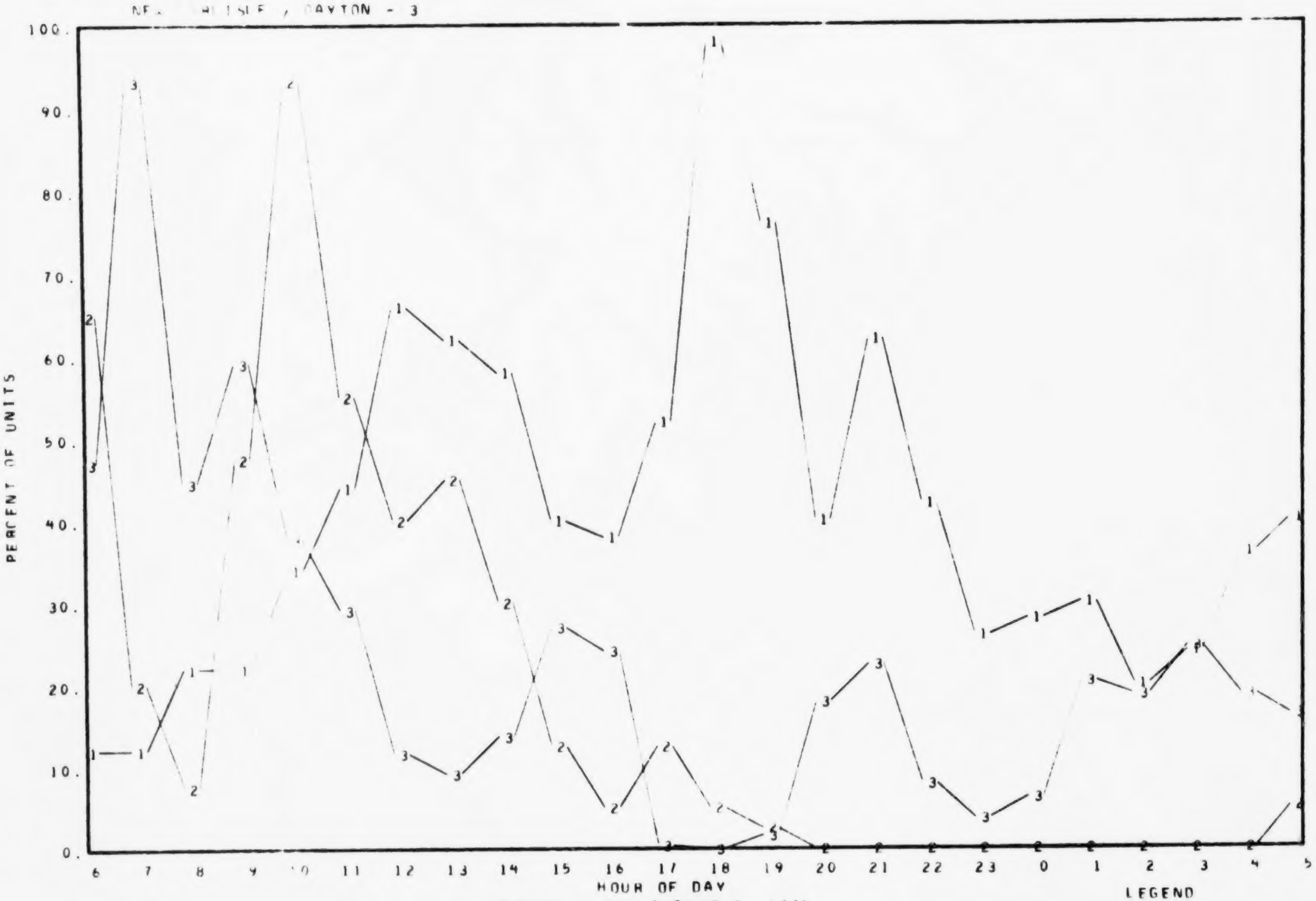

NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 1 FOR AUGUST 8, 1974
LEGEND
1--WIND SPEED 4.000 MPH
2--SULFUR DIOXIDE 0.020 PPM
3--NITROGEN OXIDES 0.040 PPM
4--NITRIC ACID 0.000 PPM



GRAPH 2 FOR AUGUST 8, 1974

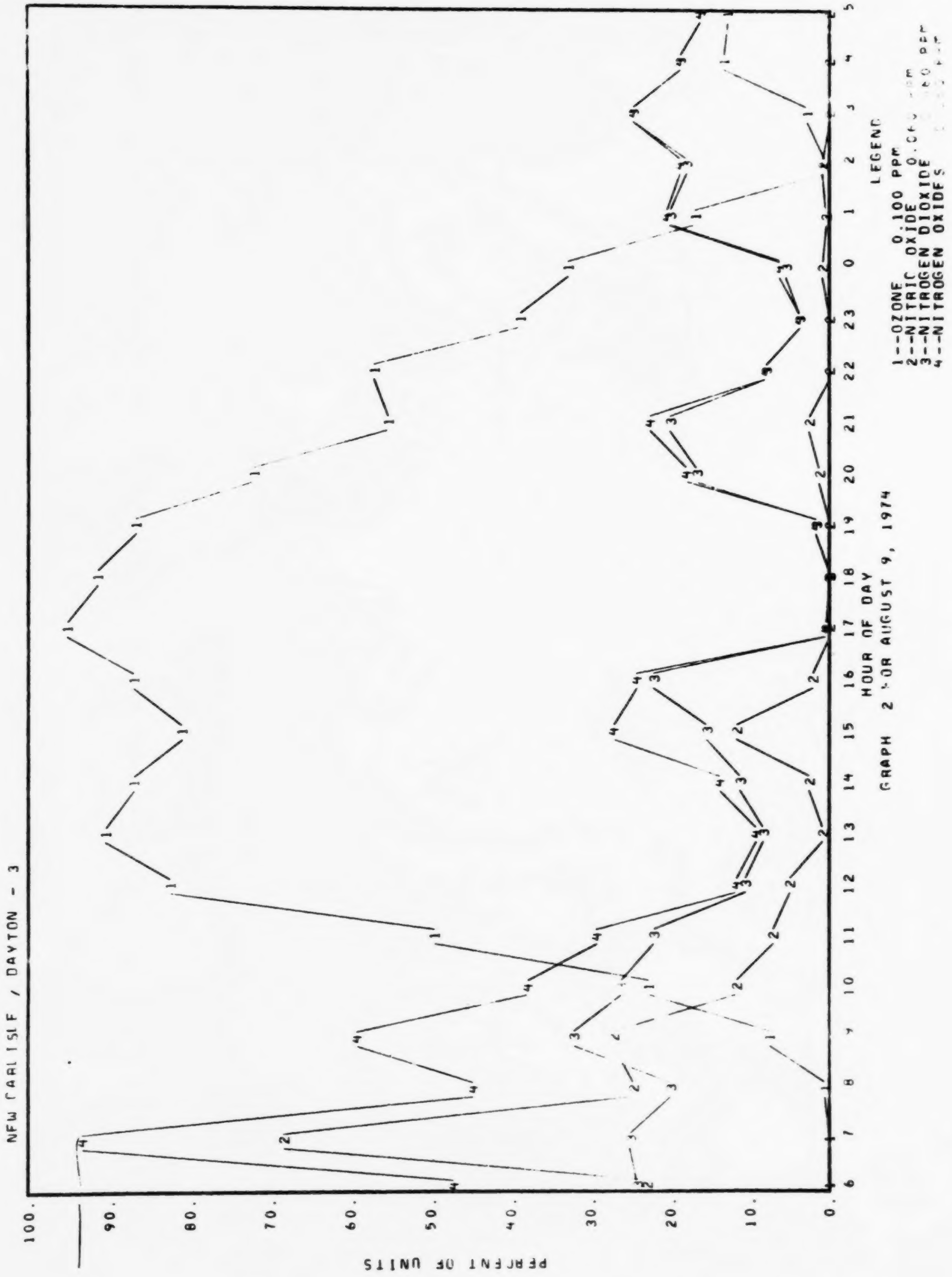
LEGEND
1--OZONE 0.090 PPM
2--NITRIC OXIDE 0.040 PPM
3--NITROGEN DIOXIDE 0.040 PPM
4--NITROGEN OXIDES 0.040 PPM

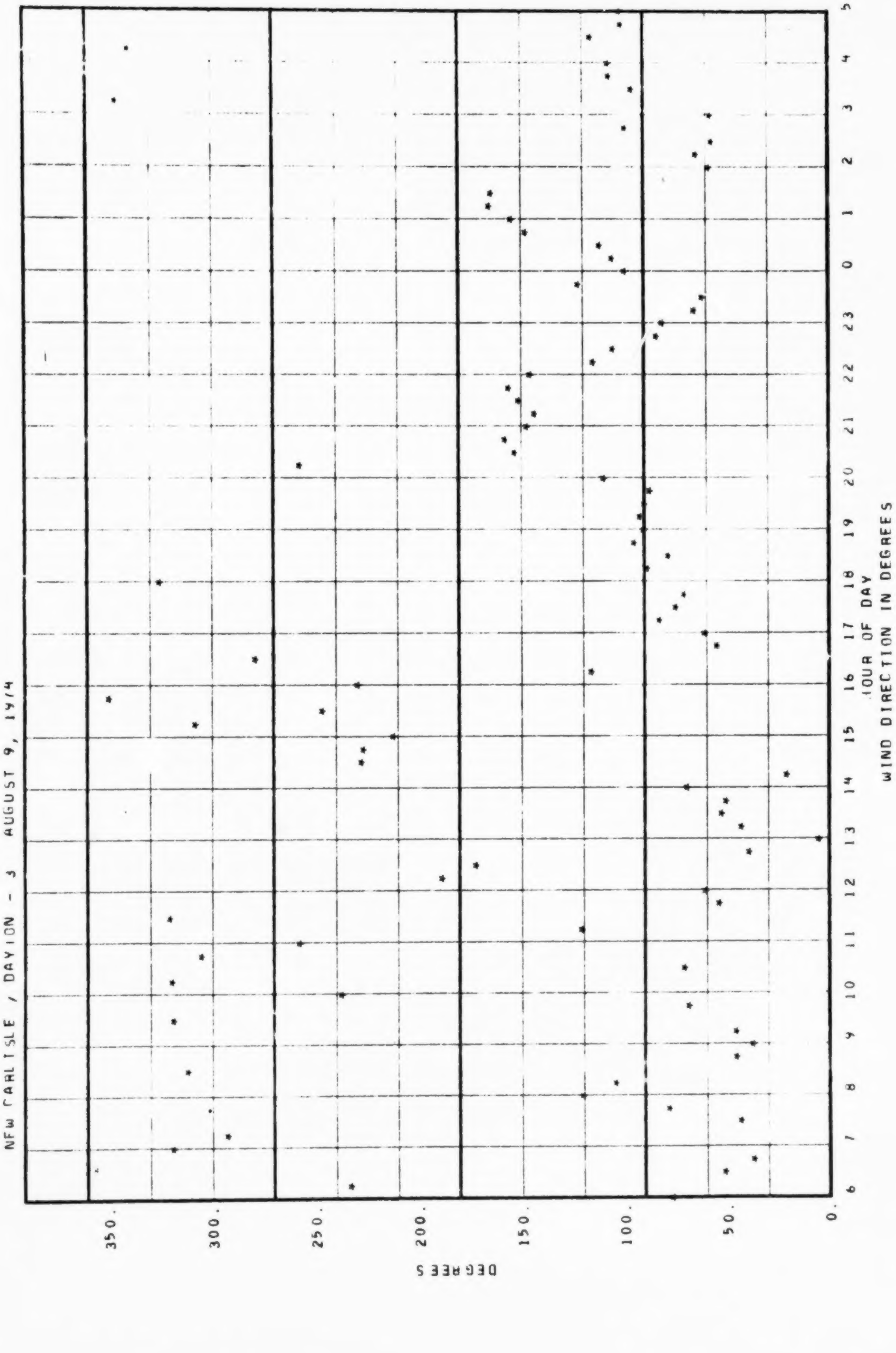

NEW CARLISLE , DAYTON - 3 AUGUST 8, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350. 300. 250. 200. 150. 100. 50. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

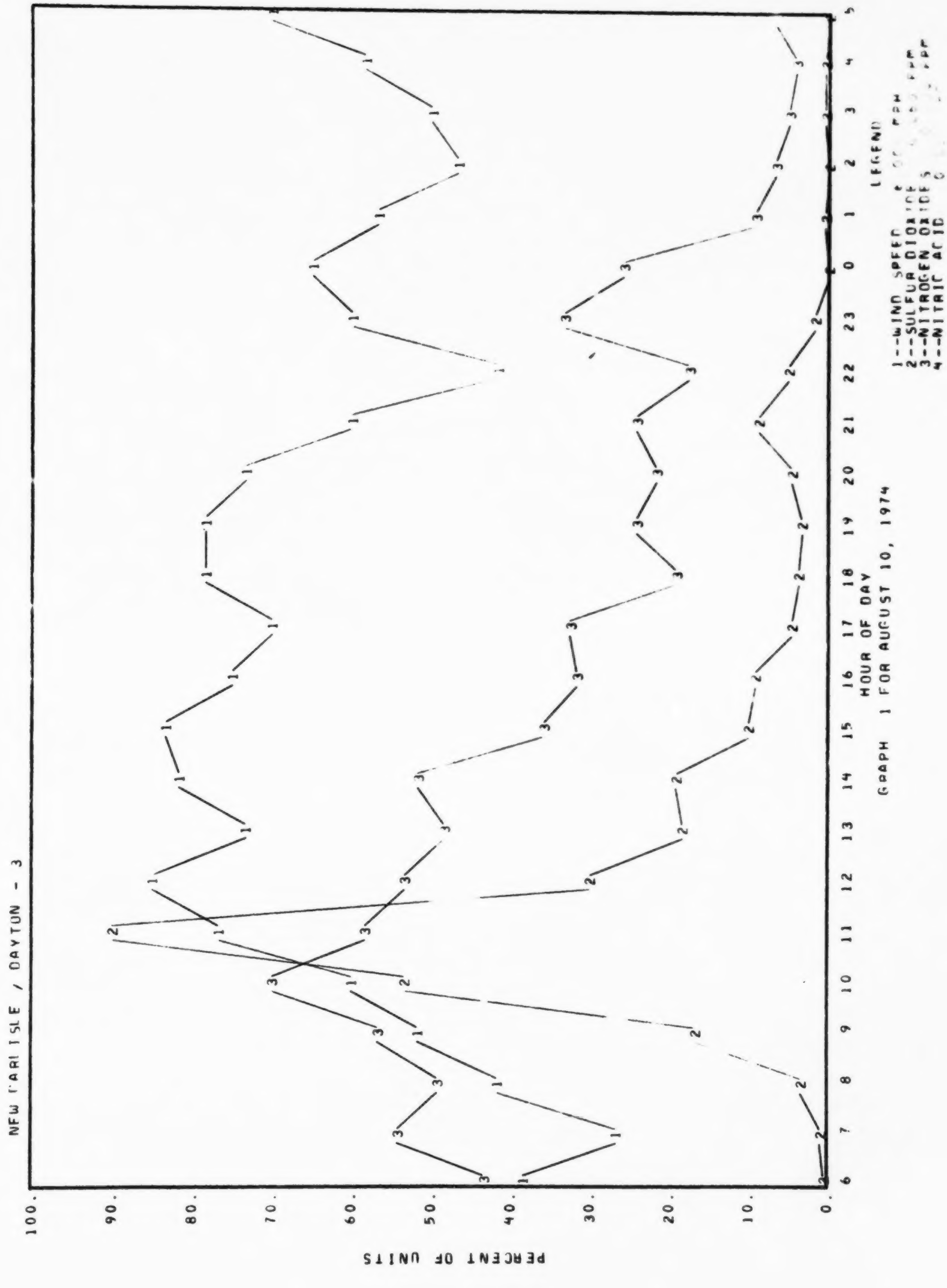


GRAPH 1 FOR AUGUST 9, 1974

LEGEND
1--WIND SPEED 5.000 MPH
2--SULFUR DIOXIDE 0.010 PPM
3--NITROGEN OXIDES 0.060 PPM
4--NITRIC ACID 0.000 PPM

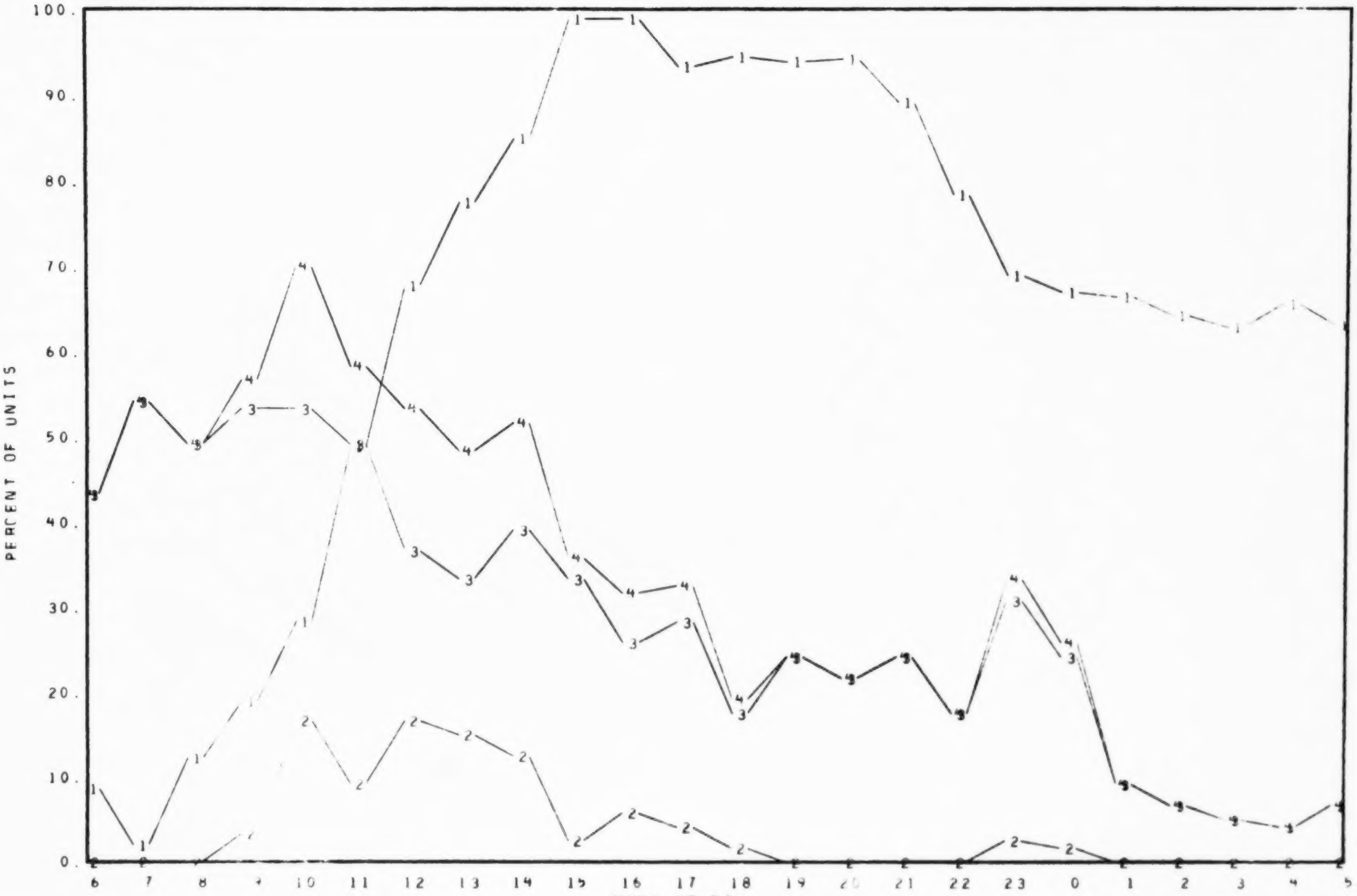

NEW CARLISLE / DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 2 FOR AUGUST 9, 1974
LEGEND
1--OZONE 0.100 PPM
2--NITRIC OXIDE
3--NITROGEN DIOXIDE
4--NITROGEN OXIDES


NEW CARLISLE , DAYTON - 3 AUGUST 9, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
0
1
2
3
4
5



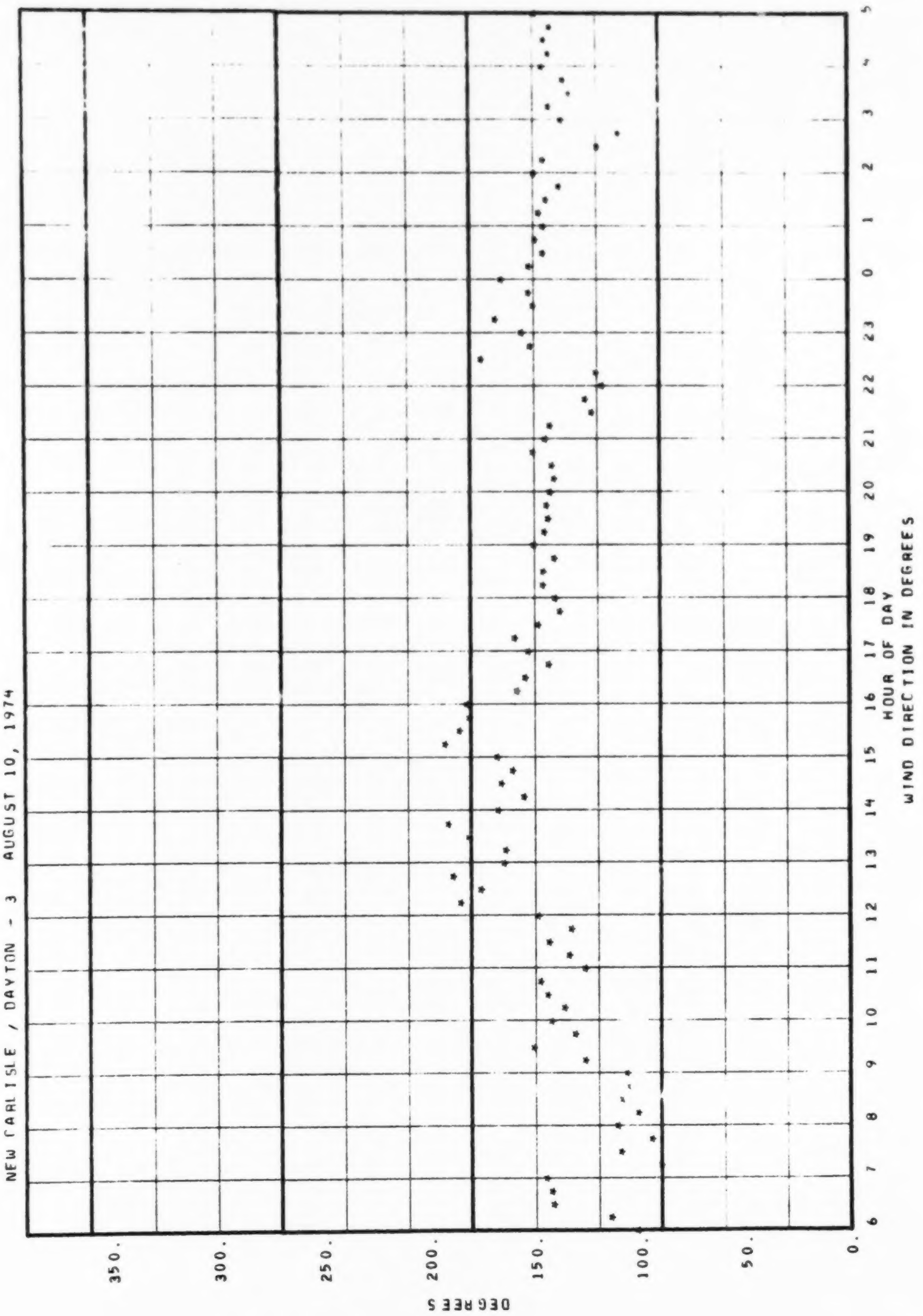
GRAPH 1 FOR AUGUST 10, 1974

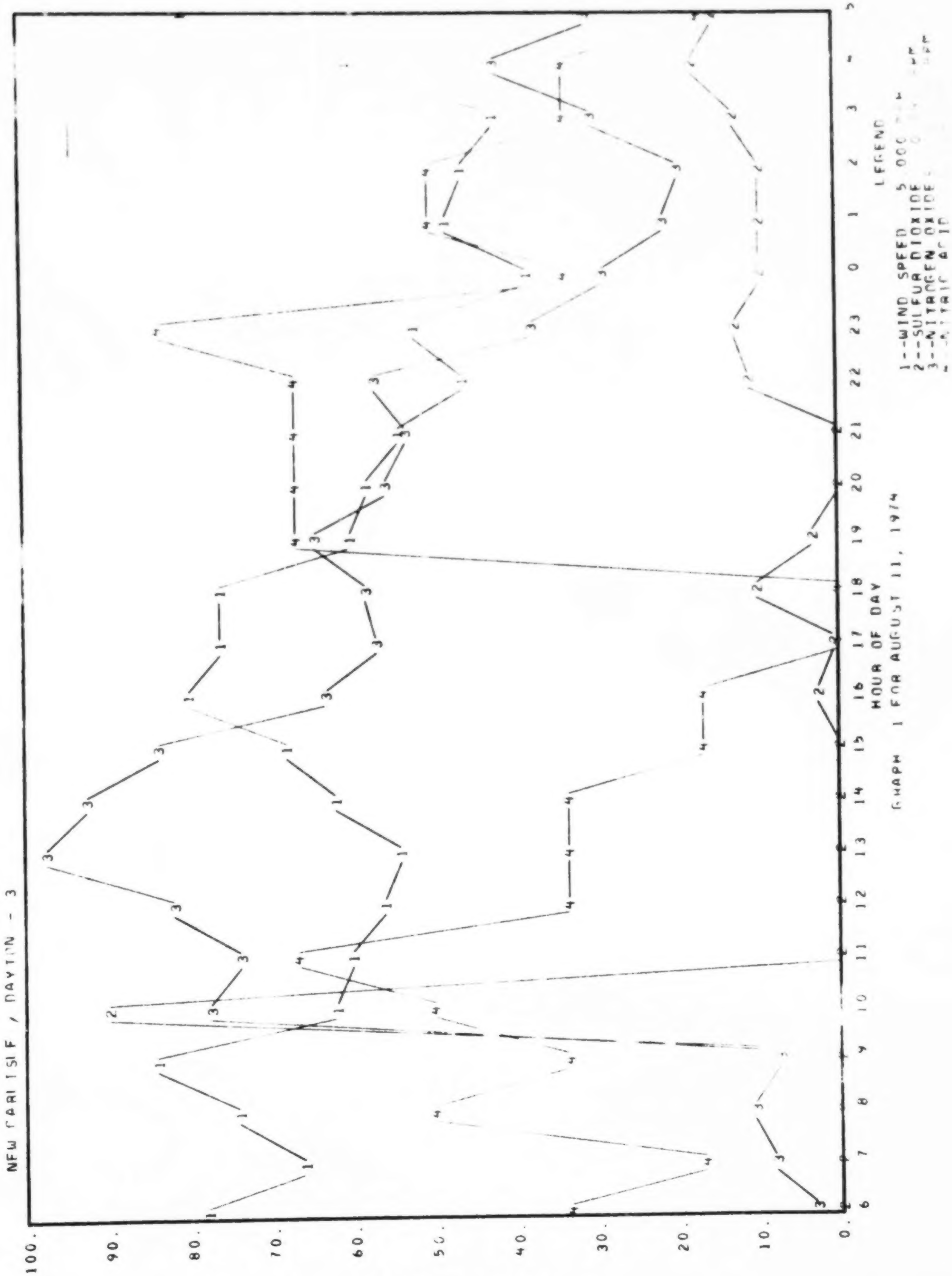
NEW CARLISLE / DAYTON - 3



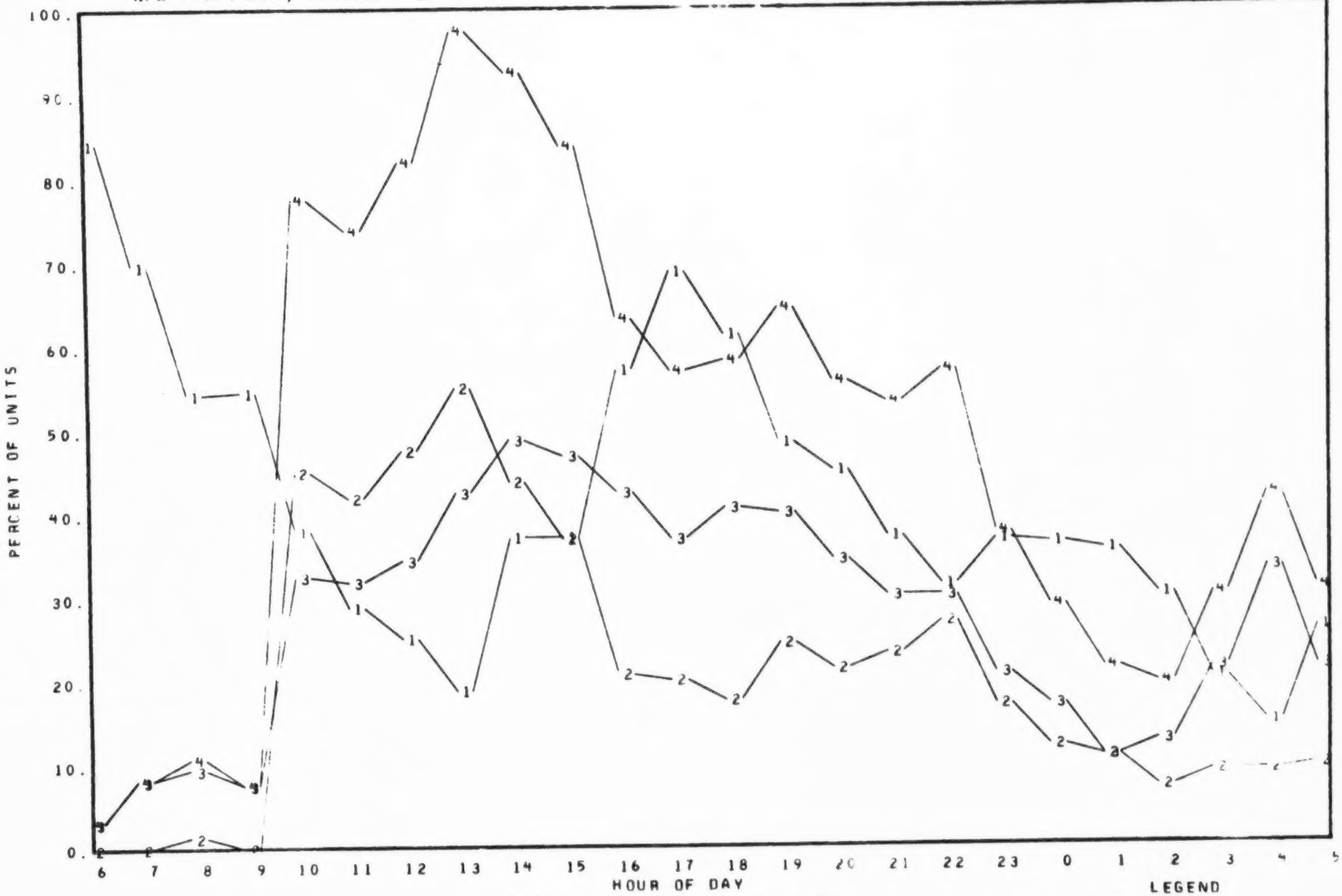
GRAPH 2 FOR AUGUST 10, 1974

LEGEND
1--OZONE 0.090 PPM
2--NITRIC OXIDE 0.030 PPM
3--NITROGEN DIOXIDE 0.030 PPM
4--NITROGEN OXIDES [illegible] PPM


NEW CARLISLE / DAYTON - 3 AUGUST 10, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
0. 50. 100. 150. 200. 250. 300. 350.


NEW CARLISLE , DAYTON - 3
PERCENT OF UNITS
HOUR OF DAY
GRAPH 1 FOR AUGUST 11, 1974
LEGEND
1--WIND SPEED
2--SULFUR DIOXIDE
3--NITROGEN OXIDES
4--NITRIC ACID

NEW CARLISLE / DAYTON - 3

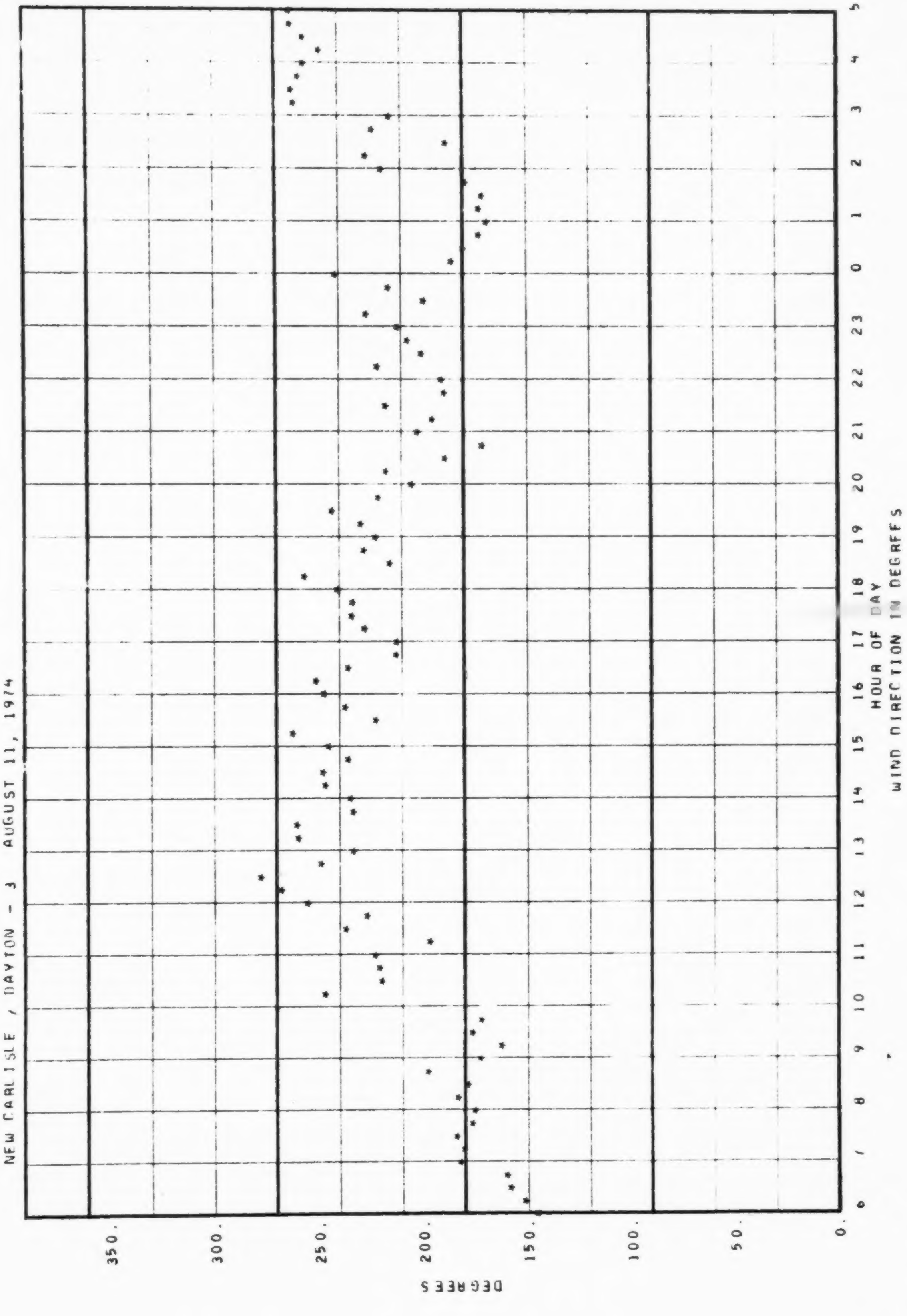


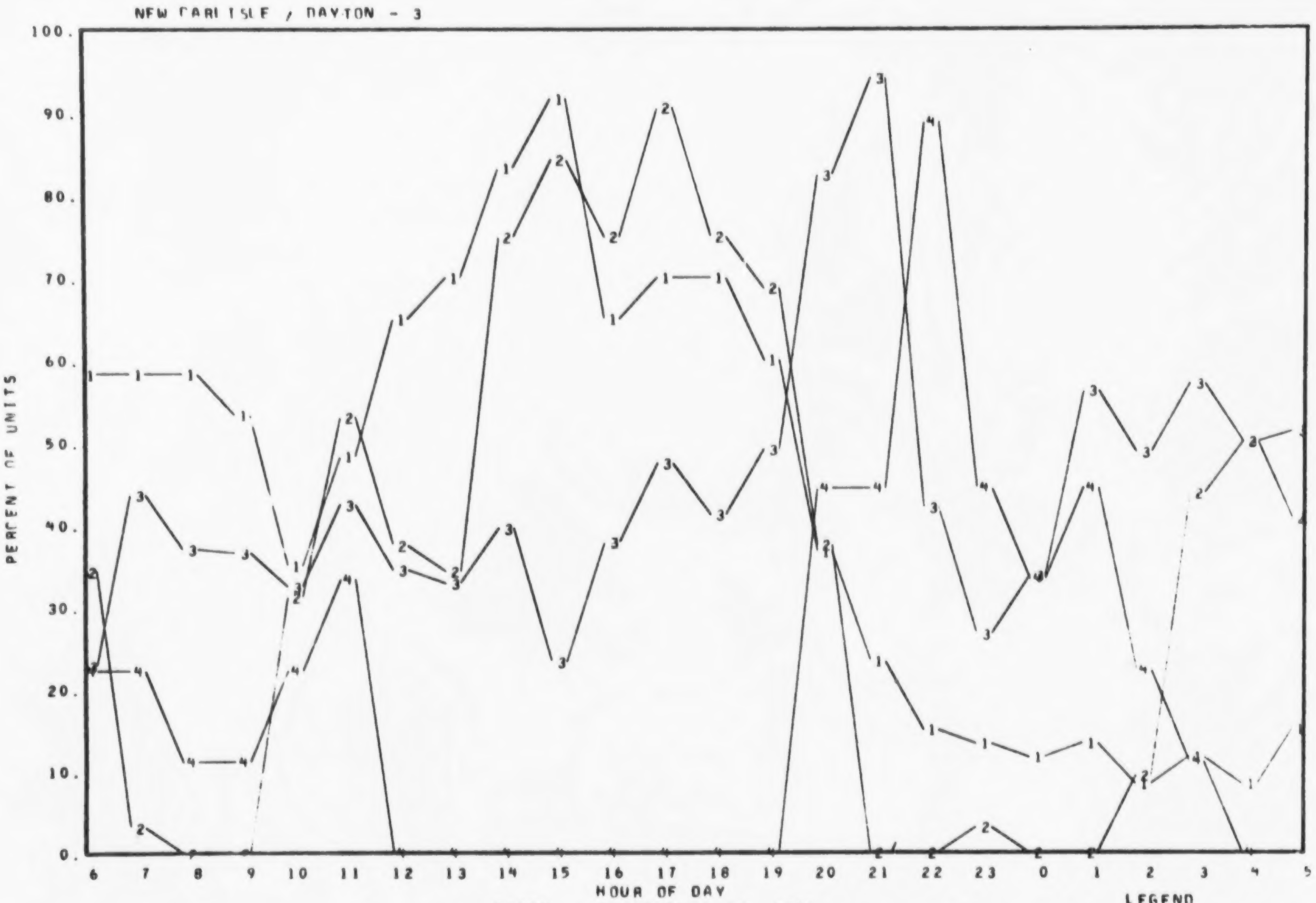
GRAPH 2 FOR AUGUST 11, 1974

LEGEND

OZONE 0.060 PPM

0.040 PPM

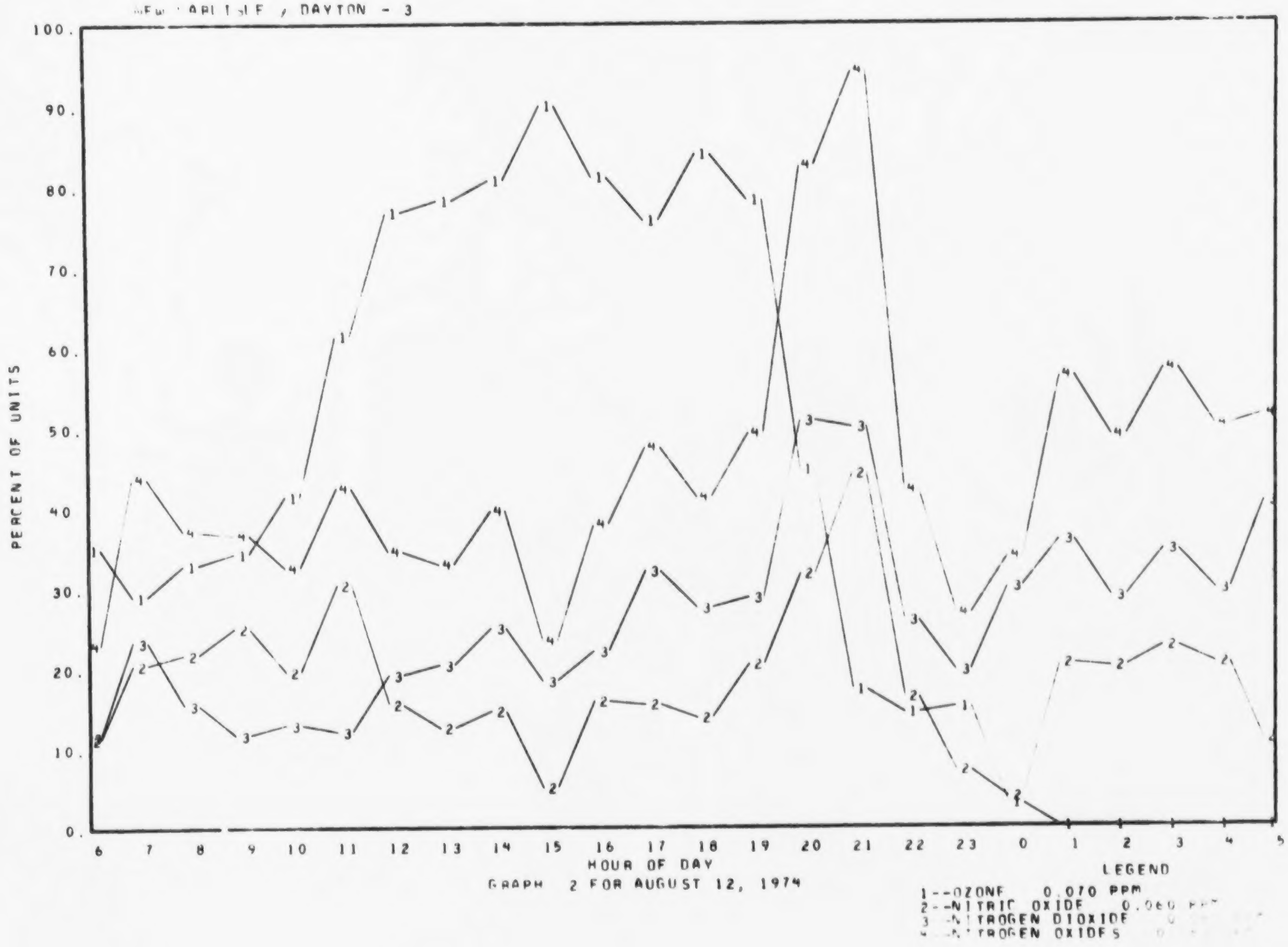

NEW CARLISLE , DAYTON - 3 AUGUST 11, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350.
300.
250.
200.
150.
100.
50.
0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

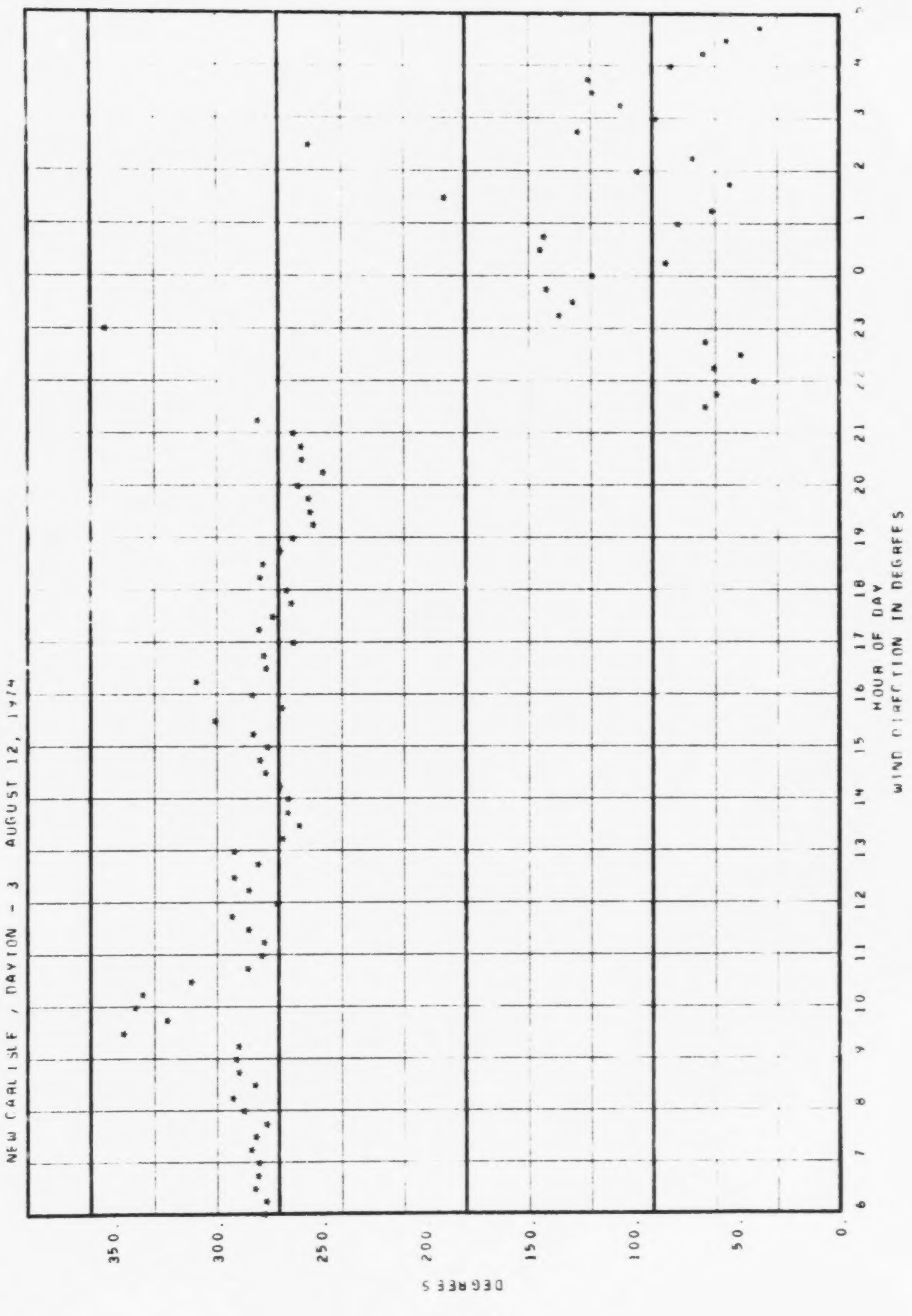


GRAPH 1 FOR AUGUST 12, 1974

LEGEND

1--WIND SPEED 6.000 MPH
2--SULFUR DIOXIDE 0.008
3--NITROGEN OXIDES 0.060
4--NITRIC ACID


NEW CARLISLE , DAYTON - 3
100.
90.
80.
70.
60.
50.
40
30.
20.
10.
0.
PERCENT OF UNITS
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5
HOUR OF DAY
GRAPH 2 FOR AUGUST 12, 1974
LEGEND
1--OZONE 0.070 PPM
2--NITRIC OXIDE 0.060
3--NITROGEN DIOXIDE
4--NITROGEN OXIDES


NEW CARLISLE , DAYTON - 3 AUGUST 12, 1974
HOUR OF DAY
WIND DIRECTION IN DEGREES
DEGREES
350. 300. 250. 200. 150. 100. 50. 0.
6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 0 1 2 3 4 5

D-i

APPENDIX D

DOWNTOWN DAYTON AND NEW CARLISLE INTEGRATED BAG SAMPLING RESULTS

JULY 17, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	-1.000	2.1[illegible]	1.700
13--NON-METHANE HYDROCARBON (PPMC)	-1.000	-1.000	-1.000
14--CARBON MONOXIDE (PPM)	-1.000	3.300	2.270
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	-1.000	-1.000	-1.000
18--PAN (PPM)	-1.000	-1.000	-1.000
20--ETHANE (PPMC)	-1.000	-1.000	-1.000
	-1.000	-1.[illegible]	-1.[illegible]

JULY 18, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	3.500	1.900	1.600
13--NON-METHANE HYDROCARBON (PPMC)	2.650	-1.000	2.000
14--CARBON MONOXIDE (PPM)	4.310	3.100	2.200
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	-1.000	-1.000	-1.000
18--PAN (PPM)	0.000	0.003	-1.000
20--ETHANE (PPMC)	-1.000	-1.000	-1.000

JULY 19, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.850	1.700	2.100
13--NON-METHANE HYDROCARBON (PPMC)	1.600	-1.000	2.000
14--CARBON MONOXIDE (PPM)	3.000	3.450	3.750
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	-1.000	-1.000	-1.000
18--PAN (PPM)	-1.000	0.000	-1.000
20--ETHANE (PPMC)	-1.000	-1.000	-1.000

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JULY 23, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.900	2.400	1.850
13--NON-METHANE HYDROCARBON (PPMC)	1.850	-1.000	1.900
14--CARBON MONOXIDE (PPM)	3.650	3.350	2.850
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	-1.000	-1.000	-1.000
18--PAN (PPM)	-1.000	-1.000	0.000
20--ETHANE (PPMC)	-1.000	-1.000	-1.000

JULY 24, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.750	1.600	1.500
13--NON-METHANE HYDROCARBON (PPMC)	1.500	-1.000	1.300
14--CARBON MONOXIDE (PPM)	2.400	2.100	1.650
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	0.012	0.077	0.000
18--PAN (PPM)	0.000	0.000	0.000
20--ETHANE (PPMC)	-1.000	-1.000	-1.000

JULY 25, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	2.100	1.600	1.500
13--NON-METHANE HYDROCARBON (PPMC)	1.850	1.400	0.850
14--CARBON MONOXIDE (PPM)	4.500	2.050	1.450
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	0.033	0.010	0.010
18--PAN (PPM)	0.000	0.000	0.000
20--ETHANE (PPMC)	0.024	0.010	-1.000

JULY 28, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.850	1.750	1.650
13--NON-METHANE HYDROCARBON (PPMC)	1.100	1.320	1.000
14--CARBON MONOXIDE (PPM)	2.260	3.500	2.050
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	0.021	0.028	0.010
18--PAN (PPM)	0.019	0.000	0.010
20--ETHANE (PPMC)	0.014	0.029	0.014

JULY 29, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	3.050	1.550	1.500
13--NON-METHANE HYDROCARBON (PPMC)	3.500	-1.000	0.880
14--CARBON MONOXIDE (PPM)	4.550	1.900	2.000
16--ETHYLENE (PPMC)	0.067	-1.000	-1.000
17--ACETYLENE (PPMC)	0.038	0.019	0.010
18--PAN (PPM)	0.003	0.000	0.000
20--ETHANE (PPMC)	0.020	-1.000	0.010

JULY 30, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.700	1.550	1.400
13--NON-METHANE HYDROCARBON (PPMC)	1.200	1.100	0.750
14--CARBON MONOXIDE (PPM)	2.400	1.700	1.300
16--ETHYLENE (PPMC)	-1.000	0.012	0.029
17--ACETYLENE (PPMC)	-1.000	0.003	0.037
18--PAN (PPM)	-1.000	0.000	0.000
20--ETHANE (PPMC)	-1.000	0.004	0.013

JULY 31, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	2.000	1.600	1.450
13--NON-METHANE HYDROCARBON (PPMC)	1.100	0.700	0.600
14--CARBON MONOXIDE (PPM)	2.000	1.350	1.650
16--ETHYLENE (PPMC)	-1.000	0.020	0.018
17--ACETYLENE (PPMC)	0.016	0.009	0.026
18--PAN (PPM)	0.000	0.001	0.000
20--ETHANE (PPMC)	0.008	0.008	0.007

AUGUST 1, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	2.450	1.750	1.450
13--NON-METHANE HYDROCARBON (PPMC)	7.700	1.150	-1.000
14--CARBON MONOXIDE (PPM)	8.900	2.400	1.400
16--ETHYLENE (PPMC)	0.101	0.021	-1.000
17--ACETYLENE (PPMC)	0.070	0.021	0.004
18--PAN (PPM)	0.022	0.004	0.000
20--ETHANE (PPMC)	0.034	0.010	0.000

AUGUST 2, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.750	1.600	1.500
13--NON-METHANE HYDROCARBON (PPMC)	1.000	0.850	-1.000
14--CARBON MONOXIDE (PPM)	1.700	1.600	1.400
16--ETHYLENE (PPMC)	0.024	0.016	-1.000
17--ACETYLENE (PPMC)	0.030	0.010	0.032
18--PAN (PPM)	0.002	0.001	0.002
20--ETHANE (PPMC)	0.013	0.009	-1.000

AUGUST 5, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.550	1.500	1.450
13--NON-METHANE HYDROCARBON (PPMC)	0.700	-1.000	0.650
14--CARBON MONOXIDE (PPM)	-1.000	1.500	1.700
16--ETHYLENE (PPMC)	0.023	0.019	0.016
17--ACETYLENE (PPMC)	0.032	0.016	0.014
18--PAN (PPM)	0.000	0.000	0.004
20--ETHANE (PPMC)	0.008	0.004	0.004

AUGUST 6, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	[illegible]	1.500	1.450
13--NON-METHANE HYDROCARBON (PPMC)	1.400	-1.000	0.600
14--CARBON MONOXIDE (PPM)	-1.000	1.800	1.600
16--ETHYLENE (PPMC)	0.046	0.014	0.010
17--ACETYLENE (PPMC)	0.079	0.018	0.014
18--PAN (PPM)	0.027	0.009	0.005
20--ETHANE (PPMC)	0.018	0.006	0.004

AUGUST 7, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	2.000	1.750	1.600
13--NON-METHANE HYDROCARBON (PPMC)	1.900	0.300	0.550
14--CARBON MONOXIDE (PPM)	3.200	2.150	1.300
16--ETHYLENE (PPMC)	0.032	0.019	0.006
17--ACETYLENE (PPMC)	0.044	0.032	0.007
18--PAN (PPM)	0.012	0.006	0.000
20--ETHANE (PPMC)	0.022	0.017	0.009

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AUGUST 8, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.550	1.550	1.550
13--NON-METHANE HYDROCARBON (PPMC)	1.000	0.700	0.650
14--CARBON MONOXIDE (PPM)	1.500	2.100	1.350
16--ETHYLENE (PPMC)	0.015	0.017	0.008
17--ACETYLENE (PPMC)	0.023	0.028	0.011
18--PAN (PPM)	0.000	0.005	0.003
20--ETHANE (PPMC)	0.008	0.007	0.003

AUGUST 9, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.950	1.700	1.450
13--NON-METHANE HYDROCARBON (PPMC)	1.600	1.120	0.700
14--CARBON MONOXIDE (PPM)	4.800	2.750	1.900
16--ETHYLENE (PPMC)	0.052	0.024	0.017
17--ACETYLENE (PPMC)	0.075	0.040	0.014
18--PAN (PPM)	0.000	0.000	0.004
20--ETHANE (PPMC)	0.019	0.012	0.006

AUGUST 1[illegible], 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.650	1.600	1.450
13--NON-METHANE HYDROCARBON (PPMC)	0.550	0.700	0.350
14--CARBON MONOXIDE (PPM)	1.350	1.400	0.950
16--ETHYLENE (PPMC)	0.011	0.013	0.005
17--ACETYLENE (PPMC)	0.021	0.017	0.010
18--PAN (PPM)	0.000	0.000	0.003
20--ETHANE (PPMC)	0.013	0.016	0.012

AUGUST 11, 1974 SITE 1

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.520	1.440	[illegible]
13--NON-METHANE HYDROCARBON (PPMC)	0.350	0.250	0.250
14--CARBON MONOXIDE (PPM)	0.350	0.500	0.900
16--ETHYLENE (PPMC)	0.006	0.005	[illegible]
17--ACETYLENE (PPMC)	0.005	0.004	0.012
18--PAN (PPM)	0.000	0.000	0.000
20--ETHANE (PPMC)	0.017	0.007	0.010

AUGUST 12, 1974 SITE 1

THREE HOUR-INTEGRATED RAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.550	1.800	1.450
13--NON-METHANE HYDROCARBON (PPMC)	0.900	0.600	0.650
14--CARBON MONOXIDE (PPM)	2.300	2.000	[illegible]
16--ETHYLENE (PPMC)	0.030	0.022	[illegible]
17--ACETYLENE (PPMC)	0.047	0.017	0.021
18--PAN (PPM)	0.000	0.000	[illegible]
20--ETHANE (PPMC)	0.010	0.003	0.004

JULY 17, 1974 STTE 3

THREE HOUR-INTEGRATED RAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.500	-1.000	-1.000
13--NON-METHANE HYDROCARBON (PPMC)	0.500	-1.000	-1.000
14--CARBON MONOXIDE (PPM)	1.650	2.500	2.140
16--ETHYLENE (PPMC)	0.021	-1.000	-1.000
17--ACETYLENE (PPMC)	0.044	-1.000	-1.000
18--PAN (PPM)	0.000	0.000	-1.000
20--ETHANE (PPMC)	0.006	-1.000	-1.000

JULY 18, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.850	-1.000	2.000
13--NON-METHANE HYDROCARBON (PPMC)	-1.000	-1.000	-1.000
14--CARBON MONOXIDE (PPM)	1.900	1.150	2.950
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	-1.000	-1.000	-1.000
18--PAN (PPM)	-1.000	0.000	0.002
20--ETHANE (PPMC)	-1.000	-1.000	-1.000

JULY 19, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.400	1.750	-1.000
13--NON-METHANE HYDROCARBON (PPMC)	1.200	1.700	-1.000
14--CARBON MONOXIDE (PPM)	2.100	2.000	-1.000
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	-1.000	-1.000	-1.000
18--PAN (PPM)	0.001	0.000	-1.000
20--ETHANE (PPMC)	-1.000	-1.000	-1.000

JULY 23, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.700	1.700	-1.000
13--NON-METHANE HYDROCARBON (PPMC)	0.800	1.000	-1.000
14--CARBON MONOXIDE (PPM)	1.650	1.300	-1.000
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	-1.000	0.013	-1.000
18--PAN (PPM)	0.000	0.000	-1.000
20--ETHANE (PPMC)	-1.000	-1.000	-1.000

JULY 24, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.750	1.500	1.500
13--NON-METHANE HYDROCARBON (PPMC)	0.950	0.600	-1.000
14--CARBON MONOXIDE (PPM)	1.350	0.950	0.550
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	-1.000	0.019	0.000
18--PAN (PPM)	0.000	0.000	0.000
20--ETHANE (PPMC)	-1.000	-1.000	-1.000

JULY 25, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	-1.000	1.750	1.650
13--NON-METHANE HYDROCARBON (PPMC)	-1.000	-1.000	0.900
14--CARBON MONOXIDE (PPM)	-1.000	1.950	1.150
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	-1.000	0.006	0.006
18--PAN (PPM)	-1.000	0.000	0.000
20--ETHANE (PPMC)	-1.000	-1.000	0.015

JULY 26, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.600	-1.000	1.650
13--NON-METHANE HYDROCARBON (PPMC)	0.900	-1.000	-1.000
14--CARBON MONOXIDE (PPM)	2.050	-1.000	1.850
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	0.013	-1.000	-1.000
18--PAN (PPM)	0.000	-1.000	0.000
20--ETHANE (PPMC)	0.011	-1.000	0.000

JULY 29, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.550	-1.000	[illegible]
13--NON-METHANE HYDROCARBON (PPMC)	0.800	-1.000	-1.000
14--CARBON MONOXIDE (PPM)	[illegible]	-1.000	[illegible]
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	0.003	-1.000	0.014
18--PAN (PPM)	0.000	-1.000	0.000
20--ETHANE (PPMC)	0.026	-1.000	-1.000

JULY 30, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.630	1.700	1.500
13--NON-METHANE HYDROCARBON (PPMC)	0.650	0.900	-1.000
14--CARBON MONOXIDE (PPM)	1.300	1.300	1.400
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	0.000	0.009	0.037
18--PAN (PPM)	0.000	0.000	0.000
20--ETHANE (PPMC)	0.004	0.007	-1.000

JULY 31, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.450	-1.000	1.500
13--NON-METHANE HYDROCARBON (PPMC)	0.700	-1.000	0.700
14--CARBON MONOXIDE (PPM)	1.300	-1.000	1.600
16--ETHYLENE (PPMC)	0.010	-1.000	0.063
17--ACETYLENE (PPMC)	0.007	-1.000	-1.000
18--PAN (PPM)	0.000	-1.000	0.000
20--ETHANE (PPMC)	0.000	-1.000	-1.000

AUGUST 1, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.45[illegible]	1.730	-1.[illegible]60
13--NON-METHANE HYDROCARBON (PPMC)	0.500	7.910	-1.000
14--CARBON MONOXIDE (PPM)	1.300	2.600	-1.000
16--ETHYLENE (PPMC)	0.026	-1.000	-1.000
17--ACETYLENE (PPMC)	0.021	0.018	0.034
18--PAN (PPM)	0.000	0.000	0.014
20--ETHANE (PPMC)	0.006	0.008	0.003

AUGUST 2, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.450	1.550	1.550
13--NON-METHANE HYDROCARBON (PPMC)	-1.000	-1.000	1.750
14--CARBON MONOXIDE (PPM)	2.050	1.000	3.050
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	0.015	0.012	0.035
18--PAN (PPM)	0.000	0.000	0.004
20--ETHANE (PPMC)	0.000	-1.000	0.012

AUGUST 5, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.550	1.700	1.500
13--NON-METHANE HYDROCARBON (PPMC)	-1.000	-1.000	-1.000
14--CARBON MONOXIDE (PPM)	3.400	-1.100	1.600
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	0.037	0.026	0.019
18--PAN (PPM)	0.002	0.009	0.003
20--ETHANE (PPMC)	0.011	0.010	0.010

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AUGUST 6, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.450	1.620	[illegible]
13--NON-METHANE HYDROCARBON (PPMC)	0.400	-1.000	0.500
14--CARBON MONOXIDE (PPM)	1.000	1.950	0.700
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	0.007	0.035	[illegible]
18--PAN (PPM)	0.002	0.004	0.000
20--ETHANE (PPMC)	[illegible]	0.010	-1.000

AUGUST 7, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.500	1.750	1.750
13--NON-METHANE HYDROCARBON (PPMC)	-1.000	-1.000	-1.000
14--CARBON MONOXIDE (PPM)	0.500	1.300	1.600
16--ETHYLENE (PPMC)	-1.000	-1.000	-1.000
17--ACETYLENE (PPMC)	0.015	0.012	0.023
18--PAN (PPM)	0.006	0.000	0.000
20--ETHANE (PPMC)	-1.000	0.014	-1.000

AUGUST 8, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.600	1.500	1.450
13--NON-METHANE HYDROCARBON (PPMC)	-1.000	0.730	1.200
14--CARBON MONOXIDE (PPM)	1.500	1.450	2.050
16--ETHYLENE (PPMC)	-1.000	0.031	0.049
17--ACETYLENE (PPMC)	0.030	0.021	0.035
18--PAN (PPM)	0.000	0.500	0.002
20--ETHANE (PPMC)	0.012	0.007	0.007

AUGUST 9, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.45[illegible]	1.73[illegible]	1.6[illegible]
13--NON-METHANE HYDROCARBON (PPMC)	0.550	0.730	0.9[illegible]
14--CARBON MONOXIDE (PPM)	1.200	1.750	1.[illegible]
16--ETHYLENE (PPMC)	0.018	0.035	0.042
17--ACETYLENE (PPMC)	0.012	0.035	0.018
18--PAN (PPM)	0.000	0.000	0.000
20--ETHANE (PPMC)	0.003	0.010	0.006

AUGUST 1[illegible], 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.45[illegible]	1.650	1.600
13--NON-METHANE HYDROCARBON (PPMC)	0.550	0.450	0.650
14--CARBON MONOXIDE (PPM)	1.100	0.900	1.300
16--ETHYLENE (PPMC)	0.016	0.013	0.022
17--ACETYLENE (PPMC)	0.014	0.014	0.016
18--PAN (PPM)	0.000	0.0[illegible]0	0.000
20--ETHANE (PPMC)	0.005	0.01[illegible]	0.014

AUGUST 11, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.500	1.550	1.550
13--NON-METHANE HYDROCARBON (PPMC)	0.350	0.470	0.700
14--CARBON MONOXIDE (PPM)	0.950	0.590	1.400
16--ETHYLENE (PPMC)	0.017	0.019	0.024
17--ACETYLENE (PPMC)	0.016	0.007	0.028
18--PAN (PPM)	0.000	0.000	0.000
20--ETHANE (PPMC)	0.012	0.021	0.009

AUGUST 12, 1974 SITE 3

THREE HOUR-INTEGRATED BAG DATA

SUBSTANCE	6-9	9-12	12-15
12--METHANE (PPMC)	1.600	1.500	1.500
13--NON-METHANE HYDROCARBON (PPMC)	0.480	0.590	0.4[illegible]
14--CARBON MONOXIDE (PPM)	1.900	1.350	1.7[illegible]
16--ETHYLENE (PPMC)	0.029	0.010	0.[illegible]24
17--ACETYLENE (PPMC)	0.035	0.004	[illegible]
18--PAN (PPM)	0.000	0.000	[illegible]
20--ETHANE (PPMC)	0.018	0.004	0.[illegible]7